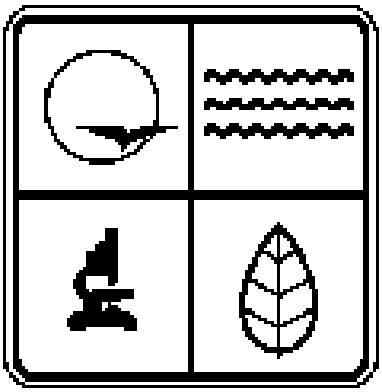
Operating Permit Application

Instructions

2003



Missouri Department of Natural Resources
Air Pollution Control Program
Post Office Box 176
Jefferson City, Missouri 65102

Telephone: (573) 751-4817

TABLE OF CONTENTS

Introduction

Missouri's Operating Permits Program includes two types of operating permits; *Part 70* operating permits and *Basic State* operating permits. The *Part 70 Operating Permit* for "Major Sources," satisfies the requirements of Title V of the 1990 Clean Air Act Amendments as set forth by the United States Congress to supplement the Clean Air Act. The operating permit rule includes provisions for an *Intermediate Operating Permit* for "Major Sources" that choose to volunteer for self-imposed emission limitations so a Part 70 permit is not required. Finally, the rule includes provisions for *Basic State Operating Permits* for sources that are not classified as "Major Sources." This rule is set forth at MISSOURI STATE RULE 10 Code of State Regulations (CSR) 10-6.065 Operating Permits.

These instructions include guidance to help the installation determine which classification (or type) of operating permit is required.

Sources that are required to obtain an operating permit under 10 CSR 10-6.065 must complete all or part of the accompanying application forms. All applicants must:

1. Submit duplicate copies of the application.
2. Submit $100.00 application fee for all submittals, except off-permit changes and administrative amendments.
3. Provide all the necessary completed forms.
4. The responsible official signatures on Form OP-A01.00 and Form OP-E02.00 must be original (no copies) and signed in ink.
5. When required, provide a completed Emissions Inventory Questionnaire (EIQ) for the previous calendar year.

Installations subject to the requirement to obtain a *Part 70 Operating Permit* are required to file an initial permit application within 12 months following commencement of operations at the installation. A *Part 70 Operating Permit* is valid for five years from the date of issuance of the permit. Permit renewal applications must be filed no earlier than 18 months, but no later than six months prior to the expiration date of an existing operating permit.

Installations subject to the requirement to obtain an *Intermediate Operating Permit* or a *Basic State Operating Permit* are required to file an initial permit application/notification within 30 days following commencement of operations at the installation. *Intermediate Operating Permits* and *Basic Operating Permits* are valid for five years from the date of receipt or acceptance, whichever is later. A permit renewal application/notification must be filed at least six months prior to the expiration date of an existing operating permit.

Operating permit amendments must be filed promptly any time when it is determined that the operating permit notification contains incorrect, incomplete, false, or misleading information. Typically, amendments are filed when the installation adds or modifies emissions sources, or when new regulations are promulgated after the submittal of a permit notification.

Applications/notifications are incomplete unless all information requested is supplied. Failure to supply any additional information requested by the permitting authority may result in the loss of the application shield for Part 70 sources, or the denial of the permit application for Basic or Intermediate sources.

A copy of Title 10, Division 10 Missouri Air Laws and Regulations can be obtained by contacting the Secretary of State's Office at (573) 751-4936. A copy is also available at http://www.sos.state.mo.us/adrules/csr/current/10csr/10csr.asp

Completed applications/notifications must be mailed to the Missouri Department of Natural Resources (Do not fax applications). However, if the installation submitting an operating permit application/notification is located in the cities of Kansas City, Springfield, or St. Louis, or the county of St. Louis, the installation must submit the operating permit application/notification directly to their respective local agency. For additional assistance or further questions, contact the appropriate authority:

1. Missouri Department of Natural Resources
   Air Pollution Control Program
   Operating Permit Unit
   P.O. Box 176
   Jefferson City, MO 65102-0176
   Telephone: (573) 751-4817
   Fax: (573) 751-2706

   Environmental Assistance Office (formerly Technical Assistance Program)
   (800) 361-4827

2. Missouri Department of Natural Resources Regional Offices

   Jefferson City Regional Office
   210 Hoover Dr.
   P.O. Box 176
   Jefferson City, MO 65102-0176
   Telephone: (573) 751-2729
   Fax: (573) 751-0014

   Kansas City Regional Office
   500 NE Colbern Road
   Lee's Summit, MO 64086-4710
   Telephone: (816) 622-7000
   Fax: (816) 622-7044

   Northeast Regional Office
   1709 Prospect Drive
   Macon, MO 63552-2602
   Telephone: (660) 385-2129
   Fax: (660) 385-6398

   Southeast Regional Office
   2155 North Westwood Blvd
   P.O. Box 1420
   Poplar Bluff, MO 63901-1420
   Telephone: (573) 840-9750
   Fax: (573) 840-9754

   Southwest Regional Office
   2040 W. Woodland
   Springfield, MO 65807-5912
   Telephone (417) 891-4300
   Fax: (417) 895-4399

   St. Louis Regional Office
   7545 S. Lindbergh, Suite 210
   St. Louis, MO 63125
   Telephone: (314) 416-2960
   Fax: (314) 416-2970

3. Local agencies

   City of St. Louis:
   Division of Air Pollution Control
   1415 North 13th Street
   St. Louis, MO 63106
   Telephone: (314) 613-7300
   Fax: (314) 613-7275

   St. Louis County:
   St. Louis County Department of Health
   Air, Land, & Water Branch
   Air Pollution Control Section
   111 South Meramec
   Clayton, MO 63105
   Telephone: (314) 615-8983
   Or (314) 615-8924

   City of Springfield:
   Air Pollution Control Authority
   227 East Chestnut Expressway
   Springfield, MO 65802
   Telephone: (417) 864-1000
   Fax: (417) 864-1499

   Kansas City:
   Kansas City Health Department
   Air Quality Section
   2400 Troost
   3rd Floor
   Kansas City, MO 64108
   Telephone: (816) 513-6314
   Fax: (816) 983-4475

Section A - General Application Information

These forms are to request the general plant information and other related information for the installation subject to this specific permit application.

FORM OP-A01.00 General Application Information

Section 1. General Installation Information.

Enter the Installation Name, FIPS Number (see Appendix A), Plant Number, Year Submitted, Street Address, County Name, Mailing Address, Phone Number, FAX Number, Senatorial District, Representative District, Contact Person, Contact Person Title and Contact Person E-mail.

Leave the Plant Number Blank, if the new installation has not been assigned a plant number by the Air Pollution Control Program. A Plant Number will be assigned upon receipt of the application.

Section 2. General Parent Company Information (if applicable).

Enter the Parent Company Name, Mailing Address, Parent Company Contact Person, Parent Company Contact Person Title, Parent Company Contact Person Phone number and Parent Company Contact Person E-mail.

Section 3. Operating Permit Type.

Check the appropriate application type.

The Missouri operating permit program consists of a two level permit program. Classification into a particular operating permit level depends on the installation's potential to emit. If the installation is a Part 70 installation, it can choose to obtain an Intermediate operating permit rather than a Part 70 permit.

1. Part 70 (Title V)
   a) Intermediate (Synthetic Minor)
2. Basic State

In determining applicability of the operating permit program to the installation, only calculate the potential to emit for the possible "limiting pollutant;" the pollutant with the highest emissions from the installation with respect to Part 70 applicability thresholds. Be careful to note all the thresholds for all pollutants emitted by the installation. Hazardous air pollutants have relatively low annual emission thresholds, and can easily be overlooked when performing an initial assessment of an installation.

Example: The installation is tasked with determining if a Part 70 permit is required. The primary pollutant emitted is particulate matter; the installation also emits other criteria pollutants in lesser amounts. Only calculate the potential emissions of particulate matter with an aerodynamic diameter of less than ten microns (PM_{10}) from the installation to address applicability of the Part 70 program. Do not spend the time and resources calculating Potential to Emit (PTE) for the other emissions.

Potential to Emit, PTE

Potential to emit is a means of comparing, for various source categories, sources of air pollution and for determining, for those source categories, whether the agency should be concerned (expressed through enforcement, permitting, and other agency activities) with the source. It is the best means currently available for putting dissimilar sources of air pollution on the same basis of review and concern, without regard to the particular category to which the source belongs. Potential emissions at an installation as defined in 10 CSR 10-6.020, *Definitions and Common Reference Tables*, shall be calculated based on the maximum annual-rated capacity of the installation, assuming continuous year-round operation.

Federally enforceable permit conditions limiting the type of materials combusted, or processed, operating rates, hours of operation or the application of air pollution control equipment shall be used in determining the annual potential.

A federally enforceable condition is any limitation or condition that is enforceable by the Administrator. It includes all New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAPs), and Hazardous Air Pollutant (HAP) requirements, requirements within the state implementation plan (SIP), any Prevention of Significant Deterioration (PSD) or non-attainment review permits, and any existing construction or operating permits.

Since the construction permit rule is approved by the EPA as part of the Missouri SIP, limits on emissions, production, or the operation used to calculate construction permit emission limits are enforceable by the EPA. Note: the operating permit program does not replace the federal/state construction permit program for new and modified sources.

> **Example:** An installation has two boilers. One was built in the 1950's and has not been modified. The boiler is only used occasionally throughout the year. The second was built in 1987 and obtained a construction permit limiting annual boiler hours to 5000. The potential to emit calculation for the first boiler will involve multiplying an emission factor by 8760 hours per year. The second boiler's calculation will multiply an emission factor by 5000 hours per year. Even though the first boiler does not run 8760 hours per year there are no federally enforceable permit conditions restricting the boiler from operating year round, therefore the potential to emit calculation must be evaluated based on continuous operation. Since the second boiler has a construction permit, any restrictions in the permit can limit the unit's potential to emit.

Exempt activities, listed in Appendix B are not required to be included in potential to emit calculations. **Insignificant** activities as identified on Form OP-C01.00 must be included in potential to emit calculations. Activities identified in Appendix C are not to be included in the potential to emit calculations.

Potential to Emit Guidance

In calculating potential emissions, the installation may consider "inherent physical limitations" in potential to emit calculations. In other words, emissions which are constrained by process limitations rather than "maximum capacity" of the unit and process bottlenecks are considered "physical limitations" when calculating potential to emit.

> **Example:** A paint spray gun has the potential to spray paint 8760 hours per year. However, the process that the spray gun supports, can paint at a maximum, only ten widgets per hour. Instead of basing criteria pollutants potential emissions on 8760 hours operation, the potential emissions can be based on the amount of paint it takes to paint ten widgets per hour annualized.

In calculating potential emissions from emergency generators, the installation may use 500 hours of operation annually for emergency generators whose sole function is to provide backup power. Be aware that an "emergency generator" is a generator whose sole function is to provide back-up power when electric power from the local utility is interrupted. It does not apply to peaking units at electric utilities, generators at industrial installations that typically operate at low rates but are not confined to emergency purposes, and it does not apply to any standby generator that is used during time periods when power is available from the utility.

For potential particulate emissions, be aware that the definition of regulated air pollutant under the operating permit program applies only to emissions of PM_{10} (particulate matter with an aerodynamic diameter of less than ten microns), not particulate matter (PM) or total suspended particulate (TSPs).

Treatment of Fugitive Emissions

Fugitive emissions are defined as those that cannot reasonably pass through a stack or vent. When determining Part 70 applicability, fugitive emissions are required to be included if any of the following criteria apply:

1. The source is within one of the source categories listed in 10 CSR 10-6.020(3)(B) Table 2, which includes any stationary source category that, as of August 7, 1980, is regulated under section 111 or 112 of the Act.
   Example: Subpart OOO, New Source Performance Standard for Non-Metallic Mineral Processing Plants, was promulgated in 1985. Therefore, non-metallic mineral processing plants do not include fugitives in potential to emit calculations. (Fugitive emissions from these sources must be listed in the application and included in the EIQ.)
2. The fugitive emissions occur within a building.
3. Any fugitive emissions of hazardous air pollutants (see Appendix D for a complete list of hazardous air pollutants).
4. Any fugitive emissions of NO_X and VOCs in an ozone non-attainment area.

If none of the above criteria are applicable, fugitive emissions are not required to be included when determining **Part 70** applicability. However, <u>all</u> fugitive emissions must be included in PTE calculations when determining Basic State applicability. The emission limit established in an Intermediate operating permit application must include fugitive emissions only if the installation is required to count fugitive emissions in their PTE calculation (Part 70 Applicability).

Part 70 (Title V) Applicability

The purpose of a Part 70 operating permit is to identify and record the existing substantive requirements applicable to regulated sources, and to assure compliance with these existing requirements. Accordingly, operating permits and their accompanying applications are vehicles for defining existing compliance obligations rather than for imposing new requirements or accomplishing other objectives. The operating permit then serves as a single document, for regulators, the public, and industry, which sets forth all of the applicable requirements.

An installation must obtain a Part 70 operating permit if:

1. The installation has potential emissions that are greater than or equal to 100 tons per year of any one of the criteria pollutants (listed below).
   a) Particulate Matter with an aerodynamic diameter of less than 10 microns (PM_{10}).
   b) Sulfur Dioxide (SO_x).
   c) Nitrogen Oxide (NO_x).
   d) Volatile Organic Compounds (VOCs).
   e) Carbon Monoxide (CO).
   f) Lead (Pb). Lead compounds are classified a Hazardous Air Pollutants (HAPs) as referenced below in section (3.) and (4.).
2. The installation in an area that is classified as a non-attainment area, *and* potential emissions are above the “major source” threshold for the non-attainment area. The reason for this is that non-attainment areas may have substantially lower “major source” thresholds, depending on the *classification* of non-attainment area.

Area Non-attainment Classification	Major Source Thresholds
Marginal	100 tons per year
Moderate	100 tons per year
Serious	50 tons per year
Severe	25 tons per year
Extreme	10 tons per year

a) A major source in ozone non-attainment areas has the potential to emit volatile organic compounds or nitrogen oxides above the major source threshold for the area's classification.
b) A major source in ozone transport regions has the potential to emit 50 tons per year or more of volatile organic compounds.
c) For a "serious" carbon monoxide non-attainment area, a major source is one that has the potential to emit of 50 tons per year or more of carbon monoxide.
d) For a "serious" particulate matter with an aerodynamic diameter of less than ten microns (PM_{10}) non-attainment area, a major source is one that has the potential to emit of 70 tons per year or more of PM_{10}.

Currently the St. Louis area is classified as a *moderate* non-attainment area. That means the major source thresholds are identical to those for sources in an attainment area. If the St. Louis area is redesignated as a *serious* non-attainment area, the major source thresholds for VOC and NO_X will fall to 50 tons per year. Installations in the St. Louis non-attainment area should keep this in mind when determining operating permit program applicability, especially if the Intermediate program is being considered.

3. The installation has potential emissions greater than or equal to ten tons per year of any individual hazardous air pollutant. Refer to Appendix D for a list of the hazardous air pollutants.
4. The installation has potential emissions greater than or equal to 25 tons per year of any combination of hazardous air pollutants. Refer to Appendix D for a list of the hazardous air pollutants.
5. The installation is subject to a standard under section 111 of the Clean Air Act. Section 111 corresponds to the New Source Performance Standards (NSPS) found in 40 CFR Part 60. These standards are adopted by reference at 10 CSR 10-6.070. The NSPS standards are established for new stationary sources of air pollution which "... may contribute significantly to air pollution which causes or contributes to the endangerment of public health or welfare." The Act requires that standards of performance for such sources reflect "... the degree of emission limitation achievable through the application of the best system of emission reduction which (taking into account the cost of achieving such reduction) the Administrator determines has been adequately demonstrated." Refer to Form OP-B02.00.
6. The installation is subject to a standard under Section 112 of the Clean Air Act. Section 112 corresponds to the National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and the Hazardous Air Pollutant (HAP) requirements developed under 40 CFR Part 61 and Part 63. These standards are adopted by reference at 10 CSR 10-6.075 and 10 CSR 10-6.080. Appendix E contains a list of pollutants regulated under section 112(r), accidental release of certain hazardous air pollutants. An installation is not required to obtain a Part 70 permit solely because it is subject to rules or requirements under section 112(r) of the Act.
   a) 40 CFR Part 61 NESHAPs
      The NESHAPs program was established in the 1970 Clean Air Act Amendments when Congress first recognized that there were other pollutants, beyond the six criteria pollutants, which caused serious environmental and health impacts. In order for a NESHAP standard to be promulgated, EPA was required to prove that a specific pollutant posed a significant risk to public health nationally. This requirement led to years of litigation for each pollutant or source category which ultimately was regulated. As a result, EPA has promulgated rules for only seven pollutants and few source categories. Refer to Form OP-B04.00 for standards that have been promulgated. A source is not required to obtain a Part 70 permit solely because it is subject to 40 CFR 61.145, Emission Standard for Asbestos Demolition and Renovation.
   b) 40 CFR Part 63 NESHAPs
      The standards developed in Part 63 are referred to as Maximum Achievable Control Technology (MACT) standards. MACT is designed to require the maximum achievable degree of reduction of hazardous air pollutant emissions from major stationary sources with consideration of the economic, environmental,

and energy impacts of the control strategy. Refer to Form OP-B03.00 for a list of standards that have been promulgated or proposed.

7. The installation is an affected source under Title IV-acid rain (40 CFR Part 72 through Part 78). An affected source is any source that includes one or more emission units subject to emission reduction requirements or limitations contained in Title IV of the Act. The purpose of Title IV is to reduce acid deposition (acid rain) through nationwide reductions in annual emissions of sulfur dioxide and nitrogen oxides. The reduction for sulfur dioxide will total ten million tons per year, and for nitrogen oxides will total approximately two million tons per year. ***This primarily affects large utility company boilers.***
8. The installation has a solid waste incinerator subject to Section 129(e) of the Clean Air Act.
9. Other source categories that may be designated by the Administrator as a Part 70 source pursuant to 40 CFR 70.3.

Missouri Deferral

An installation is classified as a "Basic State Installation" if it is subject to a standard or other requirement under section 111 or 112 of the Act (NSPS, NESHAP or MACT), regardless of the emission level, provided the US EPA Administrator has deferred a decision on whether the installation would be subject to Part 70, including area sources (except that a source is not required to obtain a permit solely because it is subject to a federal accidental release prevention requirements under section 112(r) of the Act).

> **Example:** An installation having the potential to emit more than 40 tpy but less than 100 tpy of nitrogen dioxide is a "basic" installation. Or, small drycleaners using perchloroethylene that emit below De Minimis levels, would be an example of an installation subject to a federal HAP requirement (40 CFR Part 63, Subpart M), for which EPA deferred a decision on whether the installation would be Part 70. These installations are required to obtain a Basic State Operating Permit.

The NSPS, NESHAP or MACT must *specifically* say that EPA has deferred a decision on whether the installation would be Part 70 in order to require a Basic State Operating Permit. There are three possible scenarios:

1. EPA has specifically required sources subject to the NSPS, NESHAP or MACT to obtain a Part 70 Operating Permit in the rule. In this case, installations are required to obtain a Part 70 Permit regardless of their potential to emit. An example of this is the NSPS for landfills, 40 CFR Part 60, Subpart WWW.
2. EPA has specifically deferred a decision on whether the installation would be Part 70 in the rule. In this case, installations are required to obtain at least a Basic permit, regardless of their potential to emit. An example of this is the MACT for drycleaners, 40 CFR Part 63, Subpart M. Another example is non-major pre-1992 NSPS sources that are deferred until EPA does a rulemaking.
3. EPA has not made a decision either way. In this case, installations that emit below De Minimis levels for all criteria pollutants are not required to obtain an operating permit.

Specific Part 70 (Title V) Operating Permit Type.

Check the appropriate specific application type.

1. **Initial.** If this is a first time operating permit application for this installation.
2. **Renewal.** If the operating permit issued to the company has expired or is about to expire (Submit renewal application at least 18 months but no later than six months before the actual expiration date). Provide the expiring permit or project number. Applications for permit renewals shall be subject to the same procedural requirements, including public participation, affected state review and the Administrator review, that apply to initial permit issuance. The permitting authority, in issuing a permit or renewal permit, may identify those portions that are proposed to be revised, supplemented or deleted.

In submitting an application for renewal of a Part 70 Operating Permit, the applicant may identify terms and conditions in the previous permit that should remain unchanged, and may incorporate by reference those portions of the existing permit (and the permit application and any permit amendment or modification applications) that describe products, processes, operations and emissions to which those terms and conditions apply. The applicant must identify specifically and list which portions of the previous permit or application, or both, are incorporated by reference.

3. **Off-Permit Change.** If a Part 70 Installation makes any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
   a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; The permittee may not change a permitted installation without a permit revision, if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
   b) The permittee must provide contemporaneous written notice of the change to the permitting authority and to the administrator no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. of the code of state regulations. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
   c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes;
   d) The permit shield shall not apply to these changes.

   The submittal of Form OP-A01.00 and Form OP-E01.00 with the written notice is sufficient for an Off-Permit Change request.

   Example: An installation has added a piece of equipment that is subject to the process weight rule, 10 CSR 10-6.400. The emission unit is not subject to a Prevention of Significant Deterioration permit or a technology standard under 40 CFR Parts 60, 61 or 63. This installation would qualify for an off-permit change.
4. **Administrative Amendment.** If the revisions includes any of the following.
   a) Corrects typographical errors;
   b) Identifies a change in the name, address or phone number of any person identified in the permit, or provides a similar minor administrative change at the installation;
   c) Requires more frequent monitoring or reporting by the permittee;
   d) Allows for a change in ownership or operational control of an installation where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee must be submitted to the permitting authority;
   e) Incorporates in the Part 70 Operating Permit the requirements of a unified construction permit issued by the permitting authority.

   Acid rain provisions. For purposes of any acid rain portion of a Part 70 Operating Permit, administrative permit amendments shall be governed by rules promulgated under Title IV of the Act.
5. **Modifications.** A permit modification is any revision to a Part 70 Operating Permit that is not an administrative amendment defined by 10 CSR 10-6-065(6)(E)4. A permit modification for the purposes of the acid rain portion of the permit shall be governed by regulations promulgated under Title IV of the Act (40 CFR Part 72).

a) **Minor Permit Modification.** If the modification involves changes to an installation that do not:
   1. Violate any applicable requirement;
   2. Involve significant changes to monitoring, reporting or record keeping requirements in the permit;
   3. Require or change any case-by-case or source-specific determination contained in the permit, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
   4. Establish or change a permit term for which there is no corresponding underlying applicable requirement and which the source has assumed in order to avoid an applicable requirement to which it would otherwise be subject, such as a federally enforceable emissions cap voluntarily agreed to in order to avoid classification as a Title I modification or an alternative emissions limit approved pursuant to 112(i)(5) of the Act;
   5. Constitute a Title I modification; and
   6. Constitute a significant permit modification.

   Notwithstanding subpart 10 CSR 10-6.060(6)(E)5.B.(I)(a) and 10 CSR 10-6.060(6)(E)5.C, minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in an applicable implementation plan or in applicable requirements promulgated by EPA.

   Each minor permit modification application must contain a certification by the responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and request that such procedures be used. This certification statement is contained on Form OP E01.00.

b) **Significant Permit Modification.** If the revision is not a minor modification or administrative permit revision, it is a significant permit modification. This revision includes, but is not limited to, significant changes in monitoring, reporting or record keeping permit terms and any change in the method of measuring compliance with existing permit requirements. Criteria for determining whether a proposed change is significant shall include the magnitude of the change and the resulting impact on the environment.

   Example 1: An installation is a major source for HAPs and is subject to a MACT source category that has not been promulgated by EPA – The installation is an 112(j) source that is required to submit a Part 2 application. The Part 2 application is considered a significant permit modification.

   Example 2: An installation installs equipment that is subject to a Prevention of Significant Deterioration permit or a technology standard under Parts 60, 61, or 63 (Title I modification). The new construction permit is a significant modification and the installation is required to modify the operating permit within 12 months of commencing operations.

Intermediate (synthetic minor or FESOP) Applicability

Intermediate installations are Part 70 installations that become basic state installations based on their potential to emit by accepting the imposition of voluntarily agreed to federally-enforceable limitations on the type of materials combusted or processed, operating rates, hours of operation, or emission rates more stringent than those otherwise required by rule or regulation. Intermediate sources are also known as “synthetic minors” and the permit is sometimes referred to as a FESOP (Federally Enforceable State Operating Permit).

The applicant should seriously contemplate the decision to become an Intermediate source. After taking restrictions on potential to emit to become an Intermediate source, it could take

up to 18 months to process a request to obtain a Part 70 Operating Permit if the installation decided it could not meet such restrictions. Installations should not choose to become a "synthetic minor" unless they have evaluated the consequences. Each intermediate permit is subject to EPA review and public participation requirements.

After obtaining an Intermediate permit an installation that decides a Part 70 permit is required has two scenarios in which to increase the source's potential to emit:

1. Use existing capacity (i.e. remove the voluntary limit that reduces potential emissions to below major source levels).
2. Construction or modification of the source.

In the first case, an owner or operator could not increase emissions until a Part 70 Operating Permit was obtained, which may take up to 18 months. In the second case, an applicant could apply for a construction permit, receive the permit, construct, operate for one year in accordance with the construction permit, then apply for a federal operating permit. A construction permit may take from three to six months to process.

An applicant of a federal operating permit program source that decides that they no longer want to be permitted under a Part 70 Operating Permit can apply for an Intermediate permit. The installation must submit an Intermediate permit application in order to obtain restrictions on potential to emit before the Part 70 Operating Permit terms would no longer be applicable to the source.

Specific Intermediate (synthetic minor or FESOP) Operating Permit Type.

Check the appropriate specific application type.

1. **Initial.** If this is a first time operating permit application for this installation.
2. **Renewal.** If the operating permit issued to the company has expired or is about to expire (Submit renewal application at least six months before actual expiration date). Include the expiring permit or project number. Applications for permit renewals shall be subject to the same procedural requirements, including public participation, EPA review, and affected state review, that apply to initial permit issuance.
3. **Amendment.** If at any time after an operating permit notification/application has been submitted or accepted by the permitting authority, an installation determines that the notification/application contains false, misleading, incorrect or incomplete information. Also, if an operating permit notification/application fails to include or inadequately implement any applicable requirement, including any new requirement promulgated after the permitting authority's acceptance of the operating permit notification/application.

Basic State Applicability

A Basic State Operating Permit is required for the following sources.

1. Sources with existing potential emission greater than de minimis levels but less than major source thresholds. Refer to Appendix F for a list of the de minimis levels;
2. Sources that have emission levels less than de minimis but with an incinerator (non solid waste incinerator). An incinerator is defined as any article, machine, equipment, contrivance, structure or part thereof which is used to burn refuse or to process refuse material by burning other than open burning.
3. Sources subject to a NSPS standard (111). These sources will be required to obtain Part 70 permits when the Administrator subjects the installations to the requirements by rule.
4. Sources subject to a NESHAP or other HAP requirement (112, or MACT). These sources will be required to obtain a Part 70 Permit when the Administrator subjects the installations to the requirements by rule. These sources are not required to obtain a Part 70 permit solely because they are subject to Section 112(r) of the Act.

Specific Basic State Operating Permit Type.

Check the appropriate specific application type.

1. **Initial.** If this is a first time operating permit application for this installation.
2. **Renewal.** If the operating permit issued to the company has expired or is about to expire (Submit renewal application at least six months before actual expiration date). Include the expiring permit or project number. Applications for permit renewals shall be subject to the same procedural requirements that apply to initial permit issuance.
3. **Amendment.** If at any time after an operating permit notification/application has been submitted or accepted by the permitting authority, an installation determines that the notification/application contains false, misleading, incorrect or incomplete information. Also, if an operating permit notification/application fails to include or inadequately implement any applicable requirement, including any new requirement promulgated after the permitting authority's acceptance of the operating permit notification/application.

Section 4. Applicants Certification Statement.

Applicant's certification statement must be signed by the installation's **Responsible Official**. A responsible official is:

1. The president, secretary, treasurer or vice-president of a corporation in charge of a principal business function, or any other person who performs similar policy and decision-making functions for the corporation or a duly authorized representative of this person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either-
   a) The facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding twenty-five million dollars (in second quarter 1980 dollars); or
   b) The delegation of authority to his representative is approved in advance by the permitting authority.
2. A general partner in a partnership or the proprietor in a sole proprietorship.
3. Either a principal executive officer or a ranking elected official in a municipality, state, federal, or other public agency. For the purpose of this part, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the operations of a principal geographic unit of the agency; or
4. The designated representative of an affected source insofar as actions, standards, requirements or prohibitions under Title IV of the Clean Air Act or the regulations promulgated under the Act are concerned or the designated representative for any purposes under Part 70.

Applications without a signed certification will be returned as incomplete. **Signing this document has serious legal implications – both civil and criminal.** Before signing, the installation's responsible official should be confident that the materials submitted are substantially correct and that the installation is in compliance with all applicable requirements included in the application.

FORM OP-A02.00 Application for Authority to Operate

Enter the Installation Name, FIPS Number, Plant Number and Year Submitted consistent with Form OP-A01.00.

Section 1. Principal Product.

List the installation's principle product(s) and the first two digits of the Standard Industrial Classification (SIC) code(s). SIC is a designation system by the federal government.

1. Principal Product. The main product group the installation provides.
   Example: A car manufacturing plant's principal product would be automobiles
2. Two-Digit SIC Code. Enter the two-digit Major Group Standard Industrial Classification code as listed in Appendix G that corresponds to the primary economic activity of the installation. In most cases, all emissions units at an installation will directly or indirectly support a single economic activity as represented by a Major Group SIC code. It is possible for an installation to be engaged in more than one Major Group SIC code

activity. In such a case, the primary Major Group should be entered in this field, and any secondary Major Groups should be entered at the emission unit level.

Example: A cardboard manufacturer with a printing process will list printing SIC code 27.

Section 2. Installation's Processes.

List any associated processes and the first two-digit SIC codes related to the principle product(s).

1. Processes. The processes associated with the installation.

   Example: A metal fabrication shop processes may include arc welding, LPG torch cutting, solvent cleaning, and grinding wheels. The corresponding SIC code for each process would be 17 (Construction – Special Trade Contractors). This would also be the same SIC code for the principal product the installation provides.

Section 3. Emission Inventory Questionnaire (EIQ) Submittal.

This questionnaire provides air pollution information about individual installations, and their emissions. This information is used by the MDNR to evaluate the emission history of specific installations and to provide a basis for general air pollution planning work.

Answer the question by checking the appropriate box. If the answered is no:

1. Submit one copy of the EIQ for previous calendar year with this application and;
2. In this section indicate in the number of each type EIQ form that is included as part of this application.

Section 4. Operating Permit Application Form Inventory.

Complete this table by indicating the number of each type of application form indicated. Form OP-A01.00, Form OP-A02.00, Form OP-D06.00, Form OP-D06.01, Form OP-D06.02, Form OP-D06.03, Form OP-D06.04, Form OP-D06.05 and Form OP-E01.00 are not included on this table because only one submittal of each form is required per application.

Section B - Applicable Requirements Checklist

These forms contain all requirements that are potentially applicable to an installation located in Missouri. Complete this section of forms for the installation. All Missouri air quality rules currently promulgated that could apply to an installation or any emission unit within the installation are listed on the Applicable Requirements Checklist. Under the Missouri Operating Permit Program, the owner/operator of an installation is required to identify in the permit application all applicable regulatory requirements (Federal, State, or Local) associated with the installation.

FORM OP–B01.00 through FORM OP–B12.00 Applicable Requirements Checklist

The applicable requirements on Form OP-B01.00 through Form OP-B12.00 are state, federal and local regulations organized by geographical regulatory authority. Form B-01.00 contains the Chapter 6 state regulations that are applicable to sources throughout Missouri. Forms B-02.00, B-03.00 and B-04.00 contain applicable federal regulations. Forms B-05.00 through B-12.00 contain state and local regulations organized by geographical regulatory authority. The installation will have different applicable rules due to geographic location. Some Section B forms will not be required for all installations. See the table below to determine exactly which forms to submit.

Form	Requirements	Required by
Form OP-B01.00	Entire State	All installations.
Form OP-B02.00	Federal - NSPS	All installations subject to a New Source Performance Standard
Form OP-B03.00	Federal – MACT	All installations subject to a Maximum Achievable Control Technology Regulation.
Form OP-B04.00	Federal – NESHAP	All installations subject to a National Emission Standards for Hazardous Air Pollutants.
Form OP-B05.00	Kansas City Metropolitan	Installations located in Buchanan, Cass, Clay, Jackson, Platte or Ray county.
Form OP-B06.00	Kansas City Local Ordinances	Installations located in the city limits of Kansas City, MO.
Form OP-B07.00	Outstate Missouri	Installations **not** located in Buchanan, Cass, Clay, Franklin, Greene, Jackson, Jefferson, Platte, St. Charles, St. Louis, or Ray county, or the City of St. Louis.
Form OP-B08.00	Springfield – Greene County	Installations located in Greene county.
Form OP-B09.00	Springfield Local Ordinances	Installations located in the city limits of Springfield, MO.
Form OP-B10.00	St. Louis Metropolitan	Installations located in St. Louis, St. Charles, Jefferson, or Franklin county, or the City of St. Louis.
Form OP-B11.00	St. Louis County Local Ordinances	Installation located in St. Louis county.
Form OP-B12.00	St. Louis City Local Ordinances	Installations located in the City of St. Louis.

The first step in using these forms is to identify the appropriate forms to submit with the application. The following table provides an outline of which forms apply to an installation based on geographic location. All geographic locations are defined in the Glossary.

Geographic Location	Section B Forms Required
Outstate Missouri Area	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-07.00
Kansas City Metropolitan Area	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-05.00
City of Kansas City	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-05.00, B-06.00
Springfield - Greene County Area	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-08.00
City of Springfield	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-08.00, B-09.00
St. Louis Metropolitan Area	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-10.00
City of St. Louis	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-10.00, B-12.00
St. Louis County	B-01.00, B-02.00[1], B-03.00[2], B-04.00[3], B-10.00, B-11.00

[1]This form is only required when 10 CSR 10-6.070 is checked as applicable on Form OP-B01.00.
[2]This form is only required when 10 CSR 10-6.075 is checked as applicable on Form OP-B01.00.
[3]This form is only required when 10 CSR 10-6.080 is checked as applicable on Form OP-B01.00.

Once the installation has identified the appropriate Forms, for their respective areas, the installation needs to complete the applicable regulations on those forms.

Form OP-B01.00, Form OP-B05.00, Form OP-B07.00, Form OP-B08.00 and Form OP-B10.00 are separated into three sections: State Administrative Permit Requirements, Core Permit Requirements and Applicable Requirements.

1. **State Administrative Permit Requirements.** This section of requirements identifies procedures/guidelines for the Air Pollution Control Program. These requirements do not require action by the installation. The reason code discussed below is J for all rules in this section.
2. **Core Permit Requirements.** This section of requirements identifies requirements that are applicable to all installations in Missouri.
3. **Applicable Requirements.** This section of requirements identifies all air quality regulations currently promulgated which are not core permit requirements that could apply to an installation or any emission unit within the installation.

Applicants must read through these requirements to verify the applicability of each regulation as well as to determine the compliance status with each requirement. For each rule that applies to the installation, the applicant should mark the YES column. If a rule does not apply, mark the NO column. Then, in the space next to the NO column, enter the reason the rule does not apply. The program has identified a list of common reasons a rule may not apply to a source. To indicate one of these reasons, the applicant should write the letter abbreviation for the appropriate reason in the REASON space on the form. Reason "K" is a generic flag that may be used if none of the other specific reasons adequately explains the non-applicability of the rule. If "K" is selected, the reason for the rule's non-applicability must be explained on Form OP-F01.00 General Comments.

Reasons Legend	
Letter	**Reason**
A	This pollutant is not emitted by the installation.
B	The installation is not in this source category.
C	The installation is not in a special control or non-attainment area.
D	The installation is not in this county or specific area.
E	The installation does not have this emissions unit.
F	The installation does not use this fuel type.
G	This rule does not apply because no changes have been made at the installation that would trigger these procedural requirements.
H	This method/procedure is not used by the installation.
I	*Reserved*
J	This rule is for administrative purposes.
K	Other (explain on Form OP-F01.00 General Comments).

Local Agencies

The applicable requirement forms include the local regulations that apply to sources within the jurisdiction of the four (4) local air pollution control programs within the State. The local air agencies are Kansas City (Form OP-B06.00), Springfield (Form OP-B09.00), St. Louis County (Form OP-B11.00) and St. Louis City (Form OP-B12.00). The local regulations may also be federally enforceable if the regulation is contained in the State Implementation Plan (SIP). Any questions pertaining to the local agency rules should be addressed to the specific local agency.

State Enforceability versus Federal Enforceability

The level of government (i.e., state, federal, or local) at which an air quality rule is enforced may vary. Below is a list of footnotes that classify which agency or agencies will enforce a particular regulation from section B.

1. Federal, State and Local Agency Enforceable Regulation
2. State and Local Agency Enforceable Regulation
3. Only Federally Enforced Regulation
4. Only Local Agency Enforced Regulation

Each installation is required to comply with all applicable requirements no matter at which level the regulation is enforceable.

1. Local Enforceable Rules. All rules that have been adopted by the Local Air Commission are local enforceable. The owner/operator may refer to the current version of the Local Agency Ordinances:
   a) Kansas City Health Department, Air Quality Section, Chapter 8, Air Quality
   b) City of Springfield, Air Pollution Control Authority, Chapter 2A, Air Pollution
   c) St. Louis County Department of Health, Air, Land & Water Branch, Air Pollution Control Section Chapter 612 – Air Pollution Control Code
   d) City of St. Louis, Division of Air Pollution Control, Ordinances 50163, 54699, 59270, 60023 and 60629
2. State Enforceable Rules. All rules that have been adopted by the Missouri Air Conservation Commission are state enforceable. The owner/operator may refer to the current version of the Missouri State Rules, Title 10 Division 10 (10 CSR 10), to reference the rule language that is state enforceable.
3. Federally Enforceable Rules. An applicable requirement may be federally enforceable if the regulation has been approved by the EPA as part of the State Implementation Plan (SIP) or have been finalized by EPA but not adopted by the State.

Section C - Insignificant Activities

This form inventories all insignificant activities required to be listed for Part 70 (Title V) applications. This form is not required to be included with a Basic State or Intermediate Operating Permit application/notification.

FORM OP–C01.00 Insignificant Activities Required To Be Listed

Complete Installation name, FIPS number, Plant Number, and Year Submitted.

Insignificant Activities

1. Emissions from insignificant activities shall be counted toward the installation's potential to emit.
2. Insignificant Activities include emission units that do not have a potential to emit in excess of the following **deminimis emission levels**, and for which **no** specific applicable requirements exists:
   a) The de minimis level for any hazardous air pollutant:
   b) 15 tons per year of particulate matter less than ten microns (PM_{10})
   c) 40 tons per year of sulfur oxides (SO_x)
   d) 40 tons per year of nitrogen oxides (NO_x)
   e) 40 tons per year of volatile organic compounds (VOC);
   f) 100 tons per year of carbon monoxide (CO);
   g) 0.6 tons per year of Lead (Pb).
3. If emissions from an activity are at or less than deminimis levels, but are subject to State-only or federally enforceable requirements (such as10 CSR 10-6.060, 10 CSR 10-6.400, 10 CSR 10-6.260, 10 CSR 10-6.220 or 10 CSR 10-3.060 and the regional equivalents); the activity **is not insignificant** and shall be included in the permits application on Section D forms.

Activities Not Required To Be Listed

Appendix C is a list of activities with negligible emissions that are not required to be listed in the Operating Permit Application.

Emission Unit ID, Description and Potential Estimated Emissions.

Enter the emission unit identification number. This number may be, but not limited to, the installation's personal ID Number or a number assigned to the emission unit in a previous permit. Enter the installation's name and description of the emission unit. Enter the potential estimated emissions in tons per year.

This form allows that the grouped units can be listed for each Emission Unit Number. Certain insignificant activities or processes (emitting less than de minimis levels) may be grouped together and reported under one emission unit. The processes must be the same (or quite similar). Typically the emissions generated by each process are "small" or the processes are so similar that reporting them as distinct units adds little or nothing to this application. Any additional information associated with insignificant activities can be included on **Form OP-F01.00**, General Comments.

Example 1: If an installation has ten, 9 MM BTU/hr natural gas space heaters which produce 100 pounds of air contaminant per day, the number of grouped units would be ten, and the Description would be, "10 each, 9 -million BTU/hr natural gas space heater." The emission unit's potential estimated emitted pollutants should be marked on the form and described in tons per year.

Example 2: Two printing presses can be reported as the same emission unit. The throughputs and maximum hourly design rates are added together for reporting purposes.

Section D - Emission Unit Information

These forms inventory plant-wide conditions and emission unit information.

FORM OP-D01.00 Existing Plant-wide Permit Conditions

Complete Installation name, FIPS number, Plant Number, and Year Submitted.

This form is to be utilized by an installation that has permit conditions that are applicable to the entire installation. These conditions will be applicable to multiple Emission Units, **do not** include these conditions on each applicable Emission Unit Forms (Form OP-D03.00, Form OP-D03.10, Form OP-D03.20, Form OP-D03.30, Form OP-D04.00 or Form OP-D05.00). Please include a blank Form OP-D01.00 if an installation does not have any existing plant-wide permit conditions.

List the plant-wide permit conditions that are applicable on a plant-wide basis (i.e. production is limited to 10,000 units per 12-month rolling average, or a limit on the hours of operation). Make sure to include the construction permit number, if applicable, where these limits were established. If an installation has existing plant-wide conditions, that are not associated with a construction permit, that must be included on this form (10 CSR 10-6.170, 10 CSR 10-6.220, etc.).

List/describe the methodologies currently being utilized to demonstrate compliance with each of the existing plant-wide conditions (i.e. testing, monitoring, record keeping, periodic reporting, response to inspections, etc).

Intermediate installations that limit their potential to emit by accepting the imposition of voluntarily agreed to federally-enforceable limitations will list these conditions on this form.

FORM OP-D02.00 Proposed Plant-wide Permit Conditions

Complete Installation name, FIPS number, Plant Number, and Year Submitted.

This form is to be utilized by an installation that has proposed permit conditions that will be applicable to the entire installation. These conditions will be applicable to multiple Emission Units, **do not** include these conditions on each applicable Emission Unit Forms (Form OP-D03.00, Form OP-D03.10, Form OP-D03.20, Form OP-D03.30, Form OP-D04.00 or Form OP-D05.00). Please include a blank Form OP-D02.00 if an installation does not have any proposed plant-wide permit conditions.

List any proposed plant-wide conditions that the installation wants to establish on a plant-wide basis.

> **Example:** Consider an installation whose primary pollutant is VOCs. The installation has the potential to emit 140 tons of VOCs per year, which is based of 8760 hours of operation. If the calculation were based on 5000 hours per year, the potential would be 95 tons per year. The installation may propose a voluntary limit of 95 tons of VOCs per year, or limit themselves to 5000 hours of operation. Either limit would allow the installation to obtain an Intermediate Operating Permit. Using the 95 ton limit, the installation could show compliance by monitoring throughput and VOC content of coatings, which allows the installation to change coatings as long as it does not trigger another applicable requirement (e.g. HAP limits, VOC content of coatings limits, etc.). Using the 5000 hour limit, the installation could install non-resettable hour meters on all VOC emitting equipment to show compliance and would be required to modify the Operating Permit prior to increasing hours of operation.

List and describe the methodologies that the installation intends to utilize to demonstrate compliance with each of the proposed plant-wide conditions (i.e. testing, monitoring, record keeping, periodic reporting, response to inspections, etc.).

An Intermediate installation that intends to limit their potential to emit by accepting the imposition of voluntarily agreed to federally-enforceable limitations will list these conditions on this form.

FORM OP-D03.00 General Emission Unit Information

This is one of the Emission Unit Forms. Form OP–D03.00, Form OP-D03.10, Form OP-D03.20 or Form OP-D03.30 must be completed for each emission unit unless the installation is a Part 70 and the emission unit provisions have been incorporated by reference. An emission unit is any part or activity of an installation that emits or has the potential to emit any regulated air pollutant or any pollutant listed under Section 112(b) of the Act. The Emission Points contained in the EIQ may need to be broken down into individual Emission Units by completing a separate Form OP–D03.00, Form OP-3.10, Form OP-D03.20 or Form OP-D03.30.

Emission Unit Information Forms must be completed for each individual piece of emitting equipment associated with an emission point, and source classification code, with the exception that some similar equipment which are subject to identical requirements may be grouped. In this case, the emission units may be reported together on the form, as long as, all individual equipment meets the following requirements:

1. all the equipment falls under the same SCC,
2. all the equipment has the same control measures (if controlled)
3. all the equipment is under the same permit or has the same permit conditions, and
4. the maximum design rate/capacity entered on the form is the sum of maximum design rate/capacity for each piece of equipment being grouped.

It is recommended, but not required, to complete Section 1 and Section 2 on Form OP–D03.00 for any emission unit that this information is already identified in the EIQ.

Enter the installation name, FIPS number, plant number and year submitted consistent with Section A of Form OP–A01.00.

Emission Unit ID, Emissions Inventory Questionnaire (EIQ) Reference Number, and Source Classification Code (SCC).

Enter the emission unit identification number. The emission unit identification number may be, but not limited to, the installation's personal ID number or a number assigned to the emission unit in a previous permit. Enter Emission Inventory Questionnaire (EIQ) number and the source classification code (SCC) for this emission unit. The SCC is used to identify a specific process, the pollutants from that process and related emission factors.

Section 1. Emission Unit Description.

Enter the installation's name for the emission unit. Enter the description of the emission unit. Enter the manufacturer of the emission unit, if applicable. Enter the model number of the emission unit, if applicable. Enter the construction date of the emission unit. Enter the maximum hourly design rate (MHDR) of the emission unit. The MHDR may be dependent upon the process limitations, rather than the MHDR of the specific equipment. Enter stack number. This should be consistent with the latest EIQ submitted, if applicable. Enter temperature for this stack in degrees Fahrenheit. Enter flow rate for this stack in cubic feet per minute. Use **Form OP-F01.00**, General Comments, to document the MHDR determination and any additional information you may deem is necessary.

Section 2. Associated Air Pollution Control Equipment.

Enter control device type (e.g., electrostatic precipitator, baghouse, wet scrubber or flue gas desulfurization). Enter pollutants controlled by this control device. Enter the control efficiency for this control device. Control efficiency is the ratio of the pollutant entering the control device less the pollutant exiting the control device to the pollutant entering the control device. Enter the capture efficiency for this control device. Capture efficiency is the ratio of the pollutant entering the control device to the pollutant created by the emission unit. Enter additional control device type. Enter pollutants controlled by this additional control device. Enter the control efficiency for this additional control device. Enter the capture efficiency for this additional control device. Use

Form OP-F01, General Comments, for any additional associated air pollution control equipment information that may be necessary.

Section 3. Applicable Requirements.

Enter the pollutant (e.g., PM, NO_x or SO_2) that is subject to a specific requirement or condition, if applicable. Enter each individual applicable requirement placed on the emission unit. The term "individual applicable requirement" means each unique emission limitation or standard, control equipment requirement, work practice standard or other Federal, State, Local Rule and Regulation, consent decree or settlement agreement, voluntary permit condition, and any condition contained in a current permit which limit(s) the operation of the emission unit (an example of a permit condition would be a limit on the hours of operation, sulfur content/amount of the fuel use of the emission unit). Specific applicable requirements do not include installation-wide applicable requirements. Enter the emission limit or standard and units that the regulated pollutant or the emission unit is subject to the regulation or condition. This can be, but not limited to, an allowable emission rate, an opacity limit or a limit on the hours of operation of the emission unit. Use **Form OP-F01.00**, General Comments, for any applicable requirement information that may be necessary.

Form OP-D03.10 Boilers, Furnaces and Other Indirect Heating Sources

This form is designed to describe emission units that combust gaseous, solid or liquid fuels, such as boilers, steam generators and other internal combustion units. This form identifies information that is needed to determine rule applicability and compliance calculations for indirect heating sources.

This form may be used for each significant emissions unit with "specific applicable requirements" that is an indirect heating fuel combustion source. Specific applicable requirements may be, but not limited to, the following; local ordinances, State regulations, Federal regulations (MACT, NSPS, NESHAP, etc.), RACT, BACT, LAER, Construction Permit Conditions, consent and settlement agreements, or voluntary requirements. Specific applicable requirements do not include installation-wide applicable requirements. This form will help collect and organize the technical information, including operational characteristics and applicable requirements for each emission unit. Please copy as many DO3.10 forms as needed for multiple emission units. Please use only one DO3.10 form per emission unit, and use **Form OP–F01.00**, General Comments, for any additional information for the emission unit.

It is recommended, but not required, to complete Section 1, Section 2 and Section 3 on Form OP–D03.10 for any emission unit that this information is already identified in the EIQ.

Enter the installation name, FIPS number, plant number and year submitted consistent with Section A of Form OP–A01.00.

Emission Unit ID, Emissions Inventory Questionnaire (EIQ) Reference Number, and Source Classification Code (SCC).

Enter the emission unit identification number. The emission unit identification number may be, but not limited to, the installation's personal ID number or a number assigned to the emission unit in a previous permit. Enter Emission Inventory Questionnaire (EIQ) number and the source classification code (SCC) for this emission unit. The SCC is used to identify a specific process, the pollutants from that process and related emission factors.

Section 1. Emission Unit Description.

Enter the installation's name for this emission unit and provide a brief description of the emission unit, the manufacturer, model and serial number, and the installation date of the equipment. The description may include the type of equipment, the function of the activity or equipment, or any other descriptive information. Provide the maximum heat input in million British thermal units per hour (MM BTU/hr).

Section 2. Fuel Data.

Describe the primary fuel type that the unit will use during the majority of its operating hours and secondary (standby) fuel types including their classification (grade). Types of fuels include coal, fuel oil, natural gas, byproducts of fuels, liquefied petroleum gas, wood, coke, refinery gas, etc. Include the grade/classification of the fuel (e.g., number 2 fuel oil, pipeline grade natural gas, bituminous or lignite coal) and the maximum weight percent sulfur content of the fuel. The fuel supplier should be able to provide the fuel sulfur content. If the fuel supplier provides a range of percent sulfur content values, use the highest or worst-case value.

Section 3. Associated Air Pollution Control Equipment.

Enter control device type (e.g., electrostatic precipitator, baghouse, wet scrubber or flue gas desulfurization). Enter pollutants controlled by this control device. Enter the control efficiency for this control device. Control efficiency is the ratio of the pollutant entering the control device less the pollutant exiting the control device to the pollutant entering the control device. Enter additional control device type. Enter pollutants controlled by this additional control device. Enter the control efficiency for this additional control device. Enter the capture efficiency for this additional control device. Use **Form OP-F01.00**, General Comments, for any additional associated air pollution control equipment information that may be necessary.

Section 4. Applicable Requirements.

Enter the pollutant (e.g., PM, NO_x or SO_2) that is subject to a specific requirement or condition, if applicable. Enter each individual applicable requirement placed on the emission unit. The term "individual applicable requirement" means each unique emission limitation or standard, control equipment requirement, work practice standard or other Federal, State, Local Rule and Regulation, consent decree or settlement agreement, voluntary permit condition, and any condition contained in a current permit which limit(s) the operation of the emission unit (an example of a permit condition would be a limit on the hours of operation, sulfur content/amount of the fuel use of the emission unit). Enter the emission limit or standard and units that the regulated pollutant or the emission unit is subject to the regulation or condition. This can be, but not limited to, an allowable emission rate, an opacity limit or a limit on the hours of operation of the emission unit. Use **Form OP-F01.00**, General Comments, for any applicable requirement information that may be necessary.

Form OP-D03.20 Combustion Turbines and Internal Combustion Engines

This form is designed to describe combustion turbines and internal combustion engines which combust gaseous or liquid fuels. This form identifies information that is needed to determine rule applicability and compliance calculations for combustion turbines and internal combustion engines.

This form may be used for each significant emissions unit with "specific applicable requirements" that is an internal fuel combustion source. Specific applicable requirements may be, but not limited to, the following; local ordinances, State regulations, Federal regulations (MACT, NSPS, NESHAP, etc.), RACT, BACT, LAER, Construction Permit Conditions, consent and settlement agreements, or voluntary requirements. Specific applicable requirements do not include installation-wide applicable requirements. This form will help collect and organize the technical information, including operational characteristics and applicable requirements for each emission unit. Please copy as many DO3.20 forms as needed for multiple emission units. Please use only one DO3.20 form per emission unit, and use **Form OP-F01.00**, General Comments, for any additional information for the emission unit.

It is recommended, but not required, to complete Section 1, Section 2 and Section 3 on Form OP–D03.20 for any emission unit that this information is already identified in the EIQ.

Enter the installation name, FIPS number, plant number and year submitted consistent with Section A of Form OP–A01.00.

Emission Unit ID, Emissions Inventory Questionnaire (EIQ) Reference Number, and Source Classification Code (SCC).

Enter the emission unit identification Number. The emission unit identification number may be, but not limited to, the installation's personal ID number or a number assigned to the emission unit in a previous permit. Enter the Emission Inventory Questionnaire (EIQ) number and the source classification code (SCC) for this emission unit. The SCC is used to identify a specific process, the pollutants from that process and related emission factors.

Section 1. Emission Unit Description.

Enter the installation's name for this emission unit and provide a brief description of the emission unit, the manufacturer, model and serial number, and the installation date of the equipment. The description may include the type of equipment, the function of the activity or equipment, or any other descriptive information. Provide the maximum heat input in million British thermal units per hour (MM BTU/hr), the design rated power output and units (e.g. horsepower) and the maximum operational power output and units.

Section 2. Fuel Data.

Describe the primary fuel type that the unit will use during the majority of its operating hours and secondary (standby) fuel types including their classification/grade (e.g., pipeline grade natural gas, number 2 fuel oil, gasoline) and the maximum weight percent sulfur content of the fuel. The fuel supplier should be able to provide the fuel sulfur content. If the fuel supplier provides a range of percent sulfur content values, use the highest or worst-case value.

Section 3. Associated Air Pollution Control Equipment.

Enter control device type (e.g., electrostatic precipitator, baghouse, wet scrubber or flue gas desulfurization). Enter pollutants controlled by this control device. Enter the control efficiency for this control device. Control efficiency is the ratio of the pollutant entering the control device less the pollutant exiting the control device to the pollutant entering the control device. Enter additional control device type. Enter pollutants controlled by this additional control device. Enter the control efficiency for this additional control device. Enter the capture efficiency for this additional control device. Use **Form OP–F01.00**, General Comments, for any additional associated air pollution control equipment information that may be necessary.

Section 4. Applicable Requirements.

Enter the pollutant (e.g., PM, NO_x or SO_2) that is subject to a specific requirement or condition, if applicable. Enter each individual applicable requirement placed on the emission unit. The term "individual applicable requirement" means each unique emission limitation or standard, control equipment requirement, work practice standard or other Federal, State, Local Rule and Regulation, consent decree or settlement agreement, voluntary permit condition, and any condition contained in a current permit which limit(s) the operation of the emission unit (an example of a permit condition would be a limit on the hours of operation, sulfur content/amount of the fuel use of the emission unit). Enter the emission limit or standard and units that the regulated pollutant or the emission unit is subject to the regulation or condition. This can be, but not limited to, an allowable emission rate, an opacity limit or a limit on the hours of operation of the emission unit. Use **Form OP–F01.00**, General Comments, for any applicable requirement information that may be necessary.

Form OP-D03.30 Spray Booths

This form is designed to describe emission units in which coatings are applied in a spray booth. This form identifies information that is needed to determine rule applicability and compliance calculations for spray booths.

This form may be used for each significant spray booth emission unit with "specific" applicable requirements. Specific applicable requirements may be, but not limited to, the following; local ordinances, State regulations, Federal regulations (MACT, NSPS, NESHAP, etc.), RACT, BACT, LAER, Construction Permit Conditions, consent and settlement agreements, or voluntary requirements. Specific applicable requirements do not include installation-wide applicable

requirements. This form will help collect and organize the technical information, including operational characteristics and applicable requirements for each emission unit. Please copy as many DO3.30 forms as needed for multiple emission units. Please use only one DO3.30 form per emission unit, and use **Form OP-F01.00**, General Comments, for any additional information for the emission unit.

It is recommended, but not required, to complete Section 1, Section 2 and Section 3 on Form OP–D03.30 for any emission unit that this information is already identified in the EIQ.

Enter Installation Name, FIPS Number, Plant Number, and Year Submitted. This should be consistent with Section A of Form OP–A01.00.

Emission Unit ID, Emissions Inventory Questionnaire (EIQ) Reference Number, and Source Classification Code (SCC).

Enter the emission unit identification number. This number may be, but not limited to, the installation's personal ID number or a number assigned to the emission unit in a previous permit. Enter the EIQ Reference Number if reported on the EIQ. This should be consistent with the latest EIQ submitted, if applicable. Enter the SCC. This is used to identify a specific process, the pollutants associated with the process, and the emission factors associated with the process.

Section 1. Emission Unit Description.

Enter the installation's name for the emission unit. Enter the description of the emission unit. Enter the manufacturer of the emission unit, if applicable. Enter the model number of the emission unit, if applicable. Enter the construction date of the emission unit. Enter the maximum hourly design rate (MHDR) of the emission unit in gallons per hour. The MHDR may be dependent upon the design of the spray booth and/or the product being coated, rather than the MHDR of the application device. Enter stack number. This should be consistent with the latest EIQ submitted, if applicable. Enter temperature for this stack in degrees Fahrenheit. Enter flow rate for this stack in cubic feet per minute. Use **Form OP-F01.00**, General Comments, to document the MHDR determination and any additional information that may be necessary.

Section 2. Coating Data.

Enter the coating name with the highest density used by this emission unit. Enter the density in pounds per gallon for this coating. Enter the coating name with the highest percent solids by weight used by this emission unit. Enter the percent solids by weight for this coating. Enter the coating application method. Enter the transfer efficiency for this application method. Transfer efficiency is the ratio of the amount of coating solids deposited on the surface to the total amount of coating used. If the transfer efficiency can only be expressed as a range, you may enter the range or the lowest transfer efficiency of the range. Enter alternate application method, if applicable. Enter the alternate application method transfer efficiency, if applicable. Use **Form OP–F01.00**, General Comments, for any additional coating data information that may be necessary.

Section 3. Associated Air Pollution Control Equipment.

Enter control device type. Enter pollutants controlled by this control device. Enter the control efficiency for this control device. Control efficiency is the ratio of the pollutant entering the control device less the pollutant exiting the control device to the pollutant entering the control device. Enter the capture efficiency for this control device. Capture efficiency is the ratio of the pollutant entering the control device to the pollutant created by the emission unit. Enter additional control device type. Enter pollutants controlled by this additional control device. Enter the control efficiency for this additional control device. Enter the capture efficiency for this additional control device. Use **Form OP-F01.00**, General Comments, for any additional associated air pollution control equipment information that may be necessary.

Section 4. Applicable Requirements.

Enter the pollutant (e.g., PM, NO_x or SO_2) that is subject to a specific requirement or condition, if applicable. Enter each individual applicable requirement placed on the emission unit. The term "individual applicable requirement" means each unique emission limitation or standard, control equipment requirement, work practice standard or other Federal, State, Local Rule and Regulation, consent decree or settlement agreement, voluntary permit condition, and any

condition contained in a current permit which limit(s) the operation of the emission unit (an example of a permit condition would be a limit on the hours of operation, sulfur content/amount of the fuel use of the emission unit). Enter the emission limit or standard and units that the regulated pollutant or the emission unit is subject to the regulation or condition. This can be, but not limited to, an allowable emission rate, an opacity limit or a limit on the hours of operation of the emission unit. Use **Form OP-F01.00**, General Comments, for any applicable requirement information that may be necessary.

FORM OP-D04.00 Alternate Operating Scenario/Voluntary Conditions

Enter Installation Name, FIPS Number, Plant Number, and Year Submitted. This should be consistent with Section A, Form OP–A01.00.

Emission Unit ID, Emissions Inventory Questionnaire (EIQ) Reference Number, and Source Classification Code (SCC).

Enter the emission unit identification number. This number may be, but not limited to, the installation's personal ID number or a number assigned to the emission unit in a previous permit. Enter the EIQ Reference Number if reported on the EIQ. This should be consistent with the latest EIQ submitted, if applicable. Enter the SCC. This is used to identify a specific process, the pollutants associated with the process, and the emission factors associated with the process.

Section 1. Alternate Operating Scenarios.

EPA defines "alternative operating scenarios" as "terms or conditions in a Part 70 permit which assure compliance with different modes of operation for which a different applicable requirement applies and which the source is designed to accommodate". In other words, alternate operating scenarios are necessary only if different modes of operation would change the method of documenting compliance. For example, the permitting authority would include an alternative operating scenario for a boiler that is subject to a different standard when burning coal versus gas, but would not include such a scenario for different coatings used on a coating line if they are all subject to the same VOC definition. A permit revision would not be needed for any coating that meets this VOC limitation. The alternative operating scenario is not a way to impose specific permit restrictions for the installation.

As long as the installation identifies in the application "reasonably anticipated alternative operating scenarios" they can switch among them without notifying the permitting authority. The only requirement is that the installation maintain a log at the plant tracking when each mode of operation is in effect.

Keep in mind that if the installation plans to install a new unit even after the permit has been issued, they will need to apply for a state construction permit. Alternative operating scenarios do not allow a source to create "phantom scenarios" or "phantom emission units" to avoid permit review.

Describe the alternate operating scenarios, if any, that the installation intends to use with this emission unit. The alternate scenario(s) must be identified and adequately explained in the space provided. If the installation needs more space than is provided in the box, use **Form OP-F01.00**, General Comments, or an attachment labeled as "EXHIBIT FORM OP-D04.00," making sure to clearly identify that this is a continuation for a specific Alternative Operating Scenario(s) for this Emission Unit.

The installation will need to specify in Sections 2 through 5 on Form OP-D05.00, that this alternate operating scenario(s) can demonstrate compliance with all the Applicable Requirements in Section 1 of Form OP-D05.00 and any proposed Voluntary Permit Conditions contained in Section 2 of Form OP-D04.00. If uncertain about getting approval for a proposed compliance demonstration, contact the Air Pollution Control Agency that will be processing the permit prior to submitting the completed application.

Section 2. Voluntary Permit Conditions.

Describe any new conditions on the Emission Unit for the purpose of reducing the potential emissions from this Emission Unit. These proposed new conditions must be listed in the space provided and will become a federally enforceable operating condition in the permit issued for the installation. The installation will need to specify in Sections 2 through 5 on Form OP-D05.00 how compliance with the new condition(s) will be demonstrated.

If uncertain about getting approval for a proposed compliance demonstration, contact the Air Pollution Control Agency that will be processing the permit prior to submitting the completed application. If the installation needs more space than is provided in the box, use **Form OP-F01.00**, General Comments or an attachment labeled as "EXHIBIT FORM OP-D04.00," clearly marking that this is a continuation of the Voluntary Permit Conditions for this Emission Unit.

The following example illustrates two different methods of limiting emissions:

Example: Consider an emission unit whose primary pollutant is VOCs. The unit has the potential to emit 140 tons of VOCs per year, which is based of 8760 hours of operation. If the calculation were based on 5000 hours per year, the potential would be 95 tons per year. The installation may propose a voluntary limit of 95 tons of VOCs per year on the unit, or limit the unit to 5000 hours of operation. Either limit would reduce the potential emissions of the unit below major source levels. Using the 95 ton limit, the installation could show compliance by monitoring throughput and VOC content of coatings, which allows the installation to change coatings as long as it does not trigger another applicable requirement (e.g. HAP limits, VOC content of coatings limits, etc.). Using the 5000 hour limit, the installation could install a non-resettable hour meter on the unit to show compliance and would be required to modify the operating permit prior to increasing hours of operation.

FORM OP-D05.00 Compliance Determination Methods

This form is designed for the installation to propose how they will demonstrate compliance with the Applicable Requirements and any proposed Voluntary Conditions (on specific emission units) being established in this permit application. The basis of the compliance method may come from the applicable requirement or from gap-filling if the regulation does not specify how compliance should be determined. Gap-filling indicates that the source has proposed a compliance method which must be approved as part of the permit application.

This form is required for each applicable requirement, alternating operating scenario or proposed voluntary condition list on Form OPD03.00, Form OP-D03.10, Form OP-D03.20, Form OP-D03.30 or Form OP-D04.00.

The installation must specify all the current methodology utilized to ensure compliance with Applicable Requirements and conditions for the Emission Unit(s). These methodologies include all testing, monitoring, record keeping and reporting requirements as well as any additional methods established by Applicable Requirements or special permit conditions to which the Emission Unit(s) is subject. If an applicable requirement does not specify exactly what must be done to show compliance, the installation may propose practices that are appropriate to the Emission Unit(s).

For proposed Voluntary Conditions on specific emission units, the installation will need to submit a methodology that will ensure that compliance with the condition can be demonstrated (e.g. if hours of operation, a logbook for recording the hours could be utilized. For other proposed conditions testing or monitoring might be the appropriate methodology). The installation is responsible for ensuring that these methods can be approved. If uncertain about getting approval for a proposed methodology, the installation may contact the Air Pollution Control Program that will be processing the permit prior to submitting a complete application.

If any alternate operating scenarios are proposed on Form OP–D04.00, the installation will need to submit methodology demonstrating that under the proposed operating scenario no applicable Rule, Regulation, Permit Condition or proposed Voluntary Condition will be violated. If uncertain about

getting approval for a proposed methodology, the installation may contact the Air Pollution Control Program that will be processing the permit prior to submitting a complete application.

If more space is needed than is available use **Form OP-F01.00**, General Comments and\or an attachment labeled as EXHIBIT FORM OP-D05.00 to provide the additional information. Sample sheets may be attached to the application which will demonstrate the proposed record keeping and reporting methods.

Enter Installation Name, FIPS Number, Plant Number, and Year Submitted. This should be consistent with Section A, Form OP-A01.00.

Emission Unit ID, Emissions Inventory Questionnaire (EIQ) Reference Number, and Source Classification Code (SCC).

Enter the emission unit identification number. This number may be, but not limited to, the installation's personal ID number or a number assigned to the emission unit in a previous permit. Enter the EIQ Reference Number if reported on the EIQ. This should be consistent with the latest EIQ submitted, if applicable. Enter the SCC. This is used to identify a specific process, the pollutants associated with the process, and the emission factors associated with the process.

Section 1. Applicable Requirement.

List the Applicable Requirement, Pollutant(s) and Emission Limitation as it appears on Form OP-D03.00, Form OP-D03.10, Form OP-D03.20, Form OP-D03.30 or Form OP-D04.00.

Section 2. Testing.

Enter the date of the test performed. List the specific test methods and procedures that are spelled out in the rule or regulation that applies to the emission unit(s). Summarize the test results.

Section 3. Monitoring.

Enter the parameter(s) being monitored (e.g. pressure drop across a baghouse, operating temperature of thermal oxidizer, etc.). See Appendix H for examples of monitoring parameters for various control devices. Describe monitoring method(s) (e.g. pressure drop gauge, thermocouple, CEMS, etc.). Describe monitoring schedule (e.g. hourly, daily, continuous, etc.). . Use **Form OP-F01.00**, General Comments, if additional space is needed.

Section 4. Record Keeping.

Enter the parameter(s) to be recorded (should be the same as the parameter(s) monitored). Describe the method that will be used to keep records (e.g. electronic, hard copy, etc.). Describe record keeping schedule (should be the same as monitoring schedule). All records should be retained for at least five years. Use **Form OP–F01.00**, General Comments, if additional space is needed.

Section 5. Reporting.

Enter all reporting requirements (e.g. monitoring reports, deviation reports, etc.). Annual compliance certifications are not required to be listed in this section; they will be listed on form OP–E01.00. Describe the schedule for each reporting requirement (e.g. monthly, quarterly, semi annual, etc.). Use **Form OP-F01.00**, General Comments, if additional space is needed.

Form OP-D06.00 through Form OP-D06.05 Core Permit Requirements

These forms contain core permit requirements that are applicable to each installation depending on their geographic location. These requirements are a summarization of the applicable standards. Each installation needs to consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements to understand the regulations. These Forms contain required information that must be reported for each installation before a permit to operate can be issued.

Form OP-D06.00 Core Permit Requirements

This form contains a summary of the requirements for 10 CSR 10-6.050, *Start-up, Shutdown and Malfunction Conditions* and 10 CSR 10-6.060, *Construction Permits Required,* which are applicable to all installations.

Form OP-D06.01 Core Permit Requirements

This form contains a summary of the requirements for 10 CSR 10-6.065, *Operating Permits,* 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants, 40 CFR Part 61 Subpart M, National Emission Standard for Asbestos,* 10 CSR 10-6.100, *Alternate Emission Limits,* 10 CSR 10-6.110, *Submission of Emission Data, Emission Fees and Process Information,* 10 CSR 10-6.130, *Controlling Emissions During Episodes of High Air Pollution Potential* and 10 CSR 10-6.150, *Circumvention*, which are applicable to all installations.

Form OP-D06.02 Core Permit Requirements

This form contains a summary of the requirements for 10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants* and 10 CSR 10-6.250, *Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements,* which are applicable to all installations.

This form contains a "Restriction of Emission of Odors" regulation that is contained in different chapters of division 10 of 10 CSR (10 CSR 10-2.070, 10 CSR 10-3.090 and 10 CSR 10-4.070). Each installation needs to select the appropriate chapter of 10 CSR 10 for the geographic location of the installation. Check "yes" or "no" for the respective regulations in the geographic areas.

This form also contains a summary of the requirements for 10 CSR 10-5.160, *Restriction of Emission of Odors*. This requirement is only applicable if the installation is located in the St. Louis Metropolitan Geographic Area. If the installation is not located in the St. Louis Metropolitan Geographic Area, the installation is not subject to the requirements for 10 CSR 10-5.160*, Restriction of Emission of Odors*.

Form OP-D06.03 Core Permit Requirements

This form contains a summary of the requirements for 10 CSR 10-6.280, *Compliance Monitoring Usage*, which is applicable to all installations.

This form also contains a summary of the requirements for 10 CSR 10-5.040*, Use of Fuel in Hand-Fired Equipment Prohibited*. This requirement is only applicable if the installation is located in the St. Louis Metropolitan Geographic Area. If the installation is not located in the St. Louis Metropolitan Geographic Area, the installation is not subject to the requirements for 10 CSR 10-5.040, *Use of Fuel in Hand-Fired Equipment Prohibited*.

Form OP-D06.04 Core Permit Requirements

This form contains an "Open Burning" regulation that is contained in different chapters of division 10 of 10 CSR (10 CSR 10-2.210, 10 CSR 10-3.030, 10 CSR 10-4.090 and 10 CSR 10-5.070). Each installation needs to select the appropriate chapter of 10 CSR 10 for the geographic location of the installation. Check "yes" or "no" for the respective regulations in the geographic areas.

This form contains a summary of the requirements for St. Louis City Ordinance 64749, Section 17, *Open Burning Restrictions*. This requirement is only applicable if the installation is located in the City Limits of St. Louis City. If the installation is not located in the City Limits of St. Louis City, the installation is not subject to the requirements for St. Louis City Ordinance 64749, Section 17, *Open Burning Restrictions*.

This form also contains a summary of the requirements for 10 CSR 10-5.240, *Additional Air Quality Control Measures May be Required When Sources are Clustered in a Small Land Area*. This requirement is only applicable if the installation is located in the St. Louis Metropolitan Geographic Area. If the installation is not located in the St. Louis Metropolitan Geographic Area,

the installation is not subject to the requirements for 10 CSR 10-5.240, *Additional Air Quality Control Measures May be Required When Sources are Clustered in a Small Land Area*.

Form OP-D06.05 Core Permit Requirements

Contains a summary of the requirements for Title VI – 40 CFR Part 82, *Protection of Stratospheric Ozone*, which is applicable to all installations.

Section E - Compliance Plan/Status

Form OP-E01.00 Compliance Plan/Status

Enter Installation Name, FIPS Number, Plant Number, and Year Submitted. This should be consistent with Section A, Form OP–A01.00.

Section 1. Compliance status with all applicable requirements effective at the time of issuance.

If the installation is in compliance with all applicable requirements when the application is submitted check "Yes."

If the installation marks "No" in this section, they must submit a compliance plan on **Form OP–F01.00**, General Comments. The plan should specify what regulation(s) the installation is not in compliance with and explain how compliance with the regulation(s) will be achieved. The plan should include a schedule of remedial measures and an enforceable sequence of actions, with milestones, leading to compliance.

Section 2. Compliance status with all applicable requirements effective during the permit term.

If the installation will be in compliance with all applicable requirements effective during the term of the permit check "Yes." An example of this would be a MACT standard that has been promulgated and is scheduled to take effect sometime during the permit term.

If the installation marks "No" in this section, they must submit a compliance plan on **Form OP–F01.00**, General Comments. The plan should specify what regulation(s) the installation expects not to be in compliance with and explain how compliance with the regulation(s) will be achieved. The plan should include a schedule of remedial measures and an enforceable sequence of actions, with milestones, leading to compliance.

Section 3. Compliance status with enhanced monitoring and compliance certification.

If the installation is in compliance with all enhanced monitoring and compliance certification requirements of the Act when the application is submitted check "Yes."

If the installation marks "No" in this section, they must describe which requirements are not being met on **Form OP–F01.00,** General Comments, and explain why the requirements are not being met.

Section 4. Schedule for submission of compliance certification during the permit term.

Basic and Intermediate installations are required to submit annual compliance certifications beginning April 1st after receipt of a date stamped copy of an application. These installations are also responsible for any additional compliance certification requirements resulting from a specific applicable regulation listed in Section D.

Part 70 installations are required to submit annual compliance certifications beginning April 1st after issuance of a Part 70 Operating Permit. These installations are also required to submit a semi-annual monitoring report beginning October 1st after issuance of a Part 70 Operating Permit (the permit will explain these requirements in more detail). Part 70 installations are also responsible for any additional compliance certification requirements resulting from a specific applicable regulation listed in Section D.

Section 5. Certification statement for Part 70 minor permit modifications.

If the installation is requesting a minor permit modification, the responsible official must certify that the proposed modification meets the criteria for use of a minor permit modification procedures and request that such procedures be used.

Minor permit modification criteria is defined in Form OP-A01.00 Section 3 instructions under the heading “Specific Part 70 (Title V) Operating Permit Type.”

Section 6. Certification of compliance with all applicable requirements.

A responsible official must sign the compliance certification. The permit application must include a description of monitoring, record keeping, reporting and test methods required to track compliance. The responsible company official is required to certify to the truth, accuracy and completeness of the compliance certification. The certification must state that:

> “Based on information formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.”

If the responsible official is unable to certify that an emission unit is in compliance with an applicable requirement, a compliance plan must be submitted according to the guidelines specified in section 1 above.

Knowingly falsifying any certification is a felony under the Clean Air Act; therefore, the responsible official must take care in preparing the certification and have confidence in the accuracy and completeness of the certification.

Section F - General Comments

Form OP-F01.00 General Comments

Additional information that may further clarify an aspect of the installation's operating permit application that has not been addressed on another form can be included on this page. For any comment made, please be sure to include: the installations name, three digit FIPS number, four digit Plant ID number and Year application was submitted. If details about specific equipment or emission units are made, then provide Emission Unit/Point numbers (consistent with EIQ points) and reference the form or section to which the information pertains.

40 CFR Part 64 -- Compliance Assurance Monitoring (CAM)

Installations subject to the applicability portion of 40 CFR Part 64, identified below, are required to submit a CAM plan as part of their operating permit application. If your installation is subject to CAM, the elements required in the CAM plan are identified in the heading "submittal requirements" below. Please use form OP-F01 or your own attachments to identify the elements required for the CAM plan.

Purpose: [§64.3 and §64.7]

1. The purpose of this part is to require, as part of the issuance of a permit under Title V of the Act, improved or new monitoring at those emission units where monitoring requirements do not exist or are inadequate to meet the requirements of this part.
2. The CAM rule aims to have a source maintain their control devices at the levels that assure compliance. The rule allows owners and operators to design CAM plans on current requirements and operating practices, to select representative parameters upon which compliance can be assured, to establish indicator ranges – or procedures for setting the indicator ranges, to use performance testing and other information to verify the parameters and ranges, and to correct control device performance problems as quickly as practicable.

Applicability: [§64.2(a)]

The requirements of this part apply to pollutant-specific emissions units at a major source that is required to obtain a Part 70 operating permit if the unit is:

1. subject to an emission limitation or standard for the applicable regulated air pollutant;
2. Use a control device (not inherent process equipment or passive methods such as lids) to achieve compliance with the emission limitation or standard, and;
3. The **pre-control** potential to emit exceeds or is equivalent to the major source threshold.

Exemptions: [§64.2(b)]

The requirements of Part 64 shall not apply to the following:

1. Emission limitations or standards proposed by the EPA after November 15, 1990 pursuant to section 111 or 112 of the Clean Air Act.
2. Stratospheric ozone protection under Title VI of the Act.
3. Acid Rain Program requirements.
4. Emission limitations or standards that apply solely under an emission trading program under the Act.
5. An emission cap that meets the requirements specified in § 70.4(b)(12).
6. Emission limitations or standards for which a Part 70 permit specifies a continuous compliance determination method as defined in § 64.1. This exemption is not applicable if the compliance method includes an assumed control device emission reduction factor that could be affected by the actual operation and maintenance of the control device.
7. Backup utility power emissions units that;
   a) Are exempt from all monitoring requirements of Part 75;

b) Are operated for the sole purpose of providing electricity during periods of peak electrical demand or emergency situations throughout the Part 70 permit term, and
c) The actual average emissions from the utility unit over the last three calendar years of operation are less than 50 percent of the amount required for a source to be classified as a major source.

Monitoring Information Submittal Deadlines: [§64.5]

1. For large pollutant-specific emissions units with the potential to emit **controlled amounts** of the regulated air pollutant equal to or greater than 100 percent of that required for a source to be classified as a major source, the owner or operator shall submit the required CAM Plan:
   a) On or after April 20, 1998, as part of an initial Part 70 application if, by that date, the application either:
   b) Has not been filed;
   c) Has not been determined to be complete by the permitting authority.
   d) On or after April 20, 1998, as part of a significant Part 70 permit revision, but only for those pollutant-specific emission units for which the proposed permit revision is applicable.
   e) Any monitoring information not submitted under 1.) or 2.) for large units shall be submitted as part of the application for a Part 70 permit renewal.
2. For non-large units subject to Part 64, the CAM Plan shall be submitted as part of the application for a Part 70 permit renewal.
3. The reopening for cause when additional requirements become applicable to a major Part 70 permitted source will not require submittal of a CAM Plan.
4. Reopening for cause may require submittal of a CAM Plan for those pollutant-specific emission units affected by the reopening when the APCP or the EPA determines that;
   a) A permit contains a material mistake or that inaccurate statements were made in establishing the permit standards or other terms or conditions, or
   b) If it is determined that the permit must be revised or revoked to assure compliance with the applicable requirements.
5. Prior to approval of the CAM Plan, Part 70 monitoring including periodic monitoring, remains in effect.

Submittal Requirements: [§64.3 and §64.4]

1. A CAM Plan must:
   a) Describe the indicators to be monitored;
   b) Describe the ranges or the process to set indicator ranges;
   c) Describe the performance criteria for the monitoring, including
      1. Specifications for obtaining representative data
      2. Verification procedures to confirm the monitoring's operational status
      3. Quality assurance and control procedures
      4. Monitoring frequency
         a) Four times per hour (minimum) if post control emissions are equal to or exceed the major source threshold
         b) One time per day (minimum) if post control emissions are less than the major source threshold
      5. Data averaging period;
   d) Provide a justification for the use of parameters, ranges, and monitoring approach;
   e) Provide emissions test data; and if necessary,
   f) Provide an implementation plan and schedule for installing, testing and performing any other activity prior to use of the monitoring.

Approval of Monitoring: [§64.6]

1. The permit shall contain conditions which provide a reasonable assurance of compliance with emission limitations.
2. When the APCP approves the proposed monitoring, permit conditions specifying the required monitoring must include the following items:

a) The approved monitoring approaches, including the indicators, or means to measure the indicators, to be monitored;
b) A definition of exceedences or excursions;
c) The duty to conduct monitoring;
d) Minimum data availability and averaging period requirements; and
e) Milestones for testing, installation, or final verification. In no case shall the beginning of the monitoring exceed 180 days after approval of the permit.

Operation of Approved Monitoring: [§64.7]

1. The permittee shall conduct the required monitoring upon issuance of a Part 70 permit that includes a CAM Plan.
2. The permittee shall properly maintain the monitoring at all times including maintaining necessary parts for routine repairs.
3. Monitoring shall be conducted continuously, or at all required intervals, whenever the pollutant-specific emissions unit is operating. This does not include data taken during periods of monitoring malfunctions, repairs, or required quality assurance or control activities. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
4. Upon detection of an excursion or exceedance, the permittee shall restore operation of the emissions unit (including the control device and capture system) to the normal manner of operation as expeditiously as practicable. Corrective actions and any follow-up shall be recorded.
5. Determination of whether acceptable procedures have been used in response to an excursion or exceedance will be based on monitoring results, review of operation and maintenance procedures and records and inspection of the control device, capture system and the process.
6. If the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the APCP and, if necessary, submit a proposed modification to their Part 70 permit to address the necessary monitoring changes.

Quality Improvement Plan (QIP): [§64.8]

1. The Part 70 permit should include conditions that specify the threshold to require a QIP. If it is determined that acceptable procedures have not been used in response to an excursion or exceedance, the APCP may require the permittee to develop and implement a QIP.
   a) A QIP shall be in writing and available for inspection.
2. Initially the plan shall include procedures for evaluating the control performance problems and, based on the results of the evaluation, the permittee shall modify the plan to include procedures for conducting one or more of the following actions:
   a) Improved preventive maintenance practices.
   b) Process operation changes.
   c) Appropriate improvements to control methods.
   d) Other steps appropriate to correct control performance.
   e) More frequent or improved monitoring in conjunction with one or more of steps a) through d).
3. If a QIP is required, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the APCP if completion of the QIP improvements exceeds 180 days from the date on which the need to implement the QIP was determined.
4. After implementation of a QIP, the APCP may require the permittee to make reasonable changes to the QIP if it is found that the QIP:
   a) Failed to address the cause of the control device performance problems or
   b) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
5. Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or

recordkeeping requirement that may apply under federal, state, or local law, or other applicable requirements under the Act.

Reporting and Recordkeeping Requirements: [§64.9]

1. On and after the date by which the permittee must use monitoring that meets the requirements of Part 64; the permittee shall submit;
   a) The normal Part 70 reports of any required monitoring at least every 6 months.
      1. All instances of deviations from permit requirements must be clearly identified.
      2. All required reports must be certified by the responsible official.
   b) The permittee shall promptly report deviations from permit requirements, including;
      1. Those attributable to upset conditions, as defined in the permit
      2. The probable cause of such deviations, and
      3. Any corrective actions or preventive measures taken.

      The APCP shall define 'prompt' in relation to the degree and type of deviation likely to occur and the applicable requirements.
   c) Summary information on the number, duration and cause (including unknown cause) of excursions or exceedances, and the corrective action taken.
   d) Summary information on the number, duration and cause (including unknown cause) for monitor downtime incidents other than daily calibration checks
   e) A description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.
2. All record keeping requirements shall be incorporated in the permit and shall require, where applicable, the following:
   a) Records of required monitoring information that include:
      1. The date, place as defined in the permit, and time of sampling or measurements;
      2. The dates analyses were performed;
      3. The company or entity that performed the analyses;
      4. The analytical techniques or methods used;
      5. The results of such analyses; and
      6. The operating conditions as existing at the time of sampling or measurement
   b) Retention of records of all required monitoring data and support information for a period of at least five years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, corrective actions taken, any written QIP required and any activities undertaken to implement a QIP, and copies of all reports required by the permit.
   c) Instead of paper records, the permittee may maintain records on microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternate media allows for expeditious inspection and does not conflict with other applicable record keeping requirements.

Savings Provisions: [§64.10]

1. Nothing in this part shall:
   a) Excuse the permittee of a source from compliance with any existing emission limitation or standard, monitoring, testing, reporting or record keeping requirement that may apply under federal, state or local law, or any other applicable requirements under the Act. The requirements of this part shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purpose of determining the monitoring to be imposed under separate authority under the Act, including monitoring in permits issued pursuant to Title I of the Act.
   b) Restrict or abrogate the authority to impose additional or more stringent monitoring, record keeping, testing or reporting requirements on a source under any provision of the Act, or state law.
   c) Restrict or abrogate the authority to take any enforcement action under the Act for any violation of an applicable requirement.

Section 112(j) – "Maximum Achievable Control Technology (MACT) Hammer" – Equivalent Emission Limitation by Permit

40 CFR Part 63, Subpart B, Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act, Sections 112(g) and 112(j), §63.50 – §63.56

Background

The 1990 Amendments to section 112 of the Clean Air Act (CAA) included a new section 112(j), which is entitled "Equivalent Emission Limitation by Permit." Section 112(j)(2) provides that the provisions of section 112(j) apply if EPA misses a deadline for promulgation of a standard under section 112(d) established in the source category schedule for standards.

In states with a Title V program, section 112(j)(3) requires the owner or operator of a major source in a source category for which EPA failed to promulgate a section 112(d) standard to submit a permit application 18 months after the missed promulgation deadline. The requirements for section 112(j) are contained in 40 CFR Part 63, Subpart B, *Requirements for Control Technology Determinations for Major Sources in Accordance with Clean Air Act, Sections 112(g) and 112(j)*, §63.50 through §63.56.

The rule proposing to implement section 112(j) of the CAA was published on July 13, 1993 (58 FR 37778). Public comments received on the proposed rule were considered, and changes EPA deemed appropriate were made in developing a final rule.

On May 20, 1994 (58 FR 26429), EPA issued a final rule for implementing section 112(j). That rule requires major source owners or operators to submit a permit application by the date 18 months after a missed date on the regulatory schedule. As required under section 112(j) of the CAA, the section 112(j) rule establishes requirements for the content of permit applications, contains provisions governing the establishment of the maximum achievable control technology (MACT) – equivalent emission limitation by the permitting authority, includes the criteria for the reviewing authority to determine completeness, and allows the applicant up to six 6 months to revise and resubmit the application. As required in section 112(j)(5) of the CAA, the rule also establishes compliance dates:

> No such pollutant may be emitted in amounts exceeding an emission limitation contained in a permit immediately for new sources and, as expeditiously as practicable, but not later than the date three years after the permit is issued for existing sources or such other compliance date as would apply under subsection (i).

Several petitioners filed for review of several provisions of the section 112(j) rule that they believed needed to be clarified or streamlined. On March 23, 2001 (66 FR 16318), EPA proposed changes to the section 112(j) rule based on the outcome of settlement negotiations between the EPA and the petitioners, as well as on other internal EPA deliberations. EPA received 27 public comment letters in response to the proposal. On April 5, 2002 (FR 67 16585), EPA amended 40 CFR Part 63, Subpart B, to reflect decisions made in connection with settlement negotiations between EPA and the litigants, as well as EPA's response to the public comments on the proposed amendments.

On April 25, 2002, the Sierra Club filed a petition seeking judicial review of the April 5, 2002 final rule. Sierra Club vs. U.S. Environmental Protection Agency, No. 02-1135 (D.C. Circuit). On June 4, 2002, Sierra Club also filed a petition seeking administrative reconsideration of certain provisions in the final rule pursuant to Clean Air Action section 307(d)(7)(B).

On August 26, 2002, EPA provided notice of a proposed settlement agreement and request for public comment in the Federal Register for the 112(j)/General Provision Litigation. The settlement proposed to reduce the time between the Part 1 and Part 2 application from 24 months to 12 months, would require submittal of all startup, shutdown and malfunction plans to the Administrator (or delegated authority), and would make certain startup, shutdown and malfunction plan provisions consistent with intent stated in the preamble to the previous

amendments. The proposed settlement agreement was open for public comment for 30 days.

On December 9, 2002, EPA proposed specific amendments to the General Provisions of Section 112(j). The proposal also contained a new timetable for the submission of section 112(j) Part 2 applications which is derived from the agreed timetable for promulgation of the remaining National Emission Standards for Hazardous Air Pollutants. The current proposed timeline is based on subpart category or subcategories:

Due Date:	MACT Standard
5/15/2003	Municipal Solid Waste Landfills
	Flexible Polyurethane Foam Fabrication Operations
	Coke Ovens: Pushing, Quenching, and Battery Stacks
	Reinforced Plastic Composites Production
	Semiconductor Manufacturing
	Refractories Manufacturing
	Brick & Structural Clay Products Manufacturing and Clay Ceramics Manufacturing
	Asphalt Roofing Manufacturing and Asphalt Processing
	Integrated Iron and Steel Manufacturing
	Hydrochloric Acid Production and Fumed Silica
	Engine Test Facilities and Rocket Testing Facilities
	Metal Furniture (Surface Coating)
	Printing, Coating, and Dyeing of Fabrics
	Wood Building Products (Surface Coating)
10/30/03	Combustion Turbines
	Lime Manufacturing
	Site Remediation
	Iron and Steel Foundries
	Taconite Iron Ore Processing
	Miscellaneous Organic Chemical Manufacturing (MON)
	Organic Liquids Distribution
	Primary Magnesium Refining
	Metal Can (Surface Coating)
	Plastic Parts and Products (Surface Coating)
	Chlorine Production
	Miscellaneous Metal Parts and Products (Surface Coating) (and Asphalt/Coal Tar Application – Metal Pipes)
04/28/04	Industrial Boilers, Institutional/Commercial Boilers and Process Heaters (that do not burn hazardous waste)
	Plywood and Composite Wood Products
	Reciprocating Internal Combustion Engines
	Auto and Light-Duty Truck (Surface Coating)
08/13/05	Industrial Boilers, Institutional/Commercial Boilers and Process Heaters (that burn hazardous waste)
	Hydrochloric Acid Production

Requirements

Installations subject to the applicability portion of 40 CFR Part 64, identified below, **are required to submit a Part 2 application by a timeline to be finalized in the Federal Register (the current proposed timeline is specified above in the Background Section),** which is a significant permit modification. If your installation is subject to Section 112(j) "MACT Hammer", the elements required for the Part 2 application are identified in the heading "submittal requirements" below. Please use form OP-F01 or your own attachments to identify the elements required for the Part 2 application.

Applicability: [§63.50(a)(2) and (a)(2)(i)]

The requirements of §63.50 through §63.56 apply to the owner or operator of affected sources within a source category or subcategory under this part that are located at a major

source (PTE 10/25 HAPs) that is subject to an approved title V permit program and for which the Administrator has failed to promulgate emission standards by the section 112(j) deadlines. If title V applicability has been deferred for a source category, then section 112(j) is not applicable for sources in that category within that State, local or tribal jurisdiction until those sources become subject to title V permitting requirements.

Submittal Requirements: [§63.53(b)]

The Part 2 MACT Application (Section 112(j) application) must contain the following information:

1. For new affected sources, the anticipated date of startup of operation;
2. The HAP emitted by each affected source in the relevant source category and an estimated total uncontrolled and controlled emission rate for HAP/HAPs (individual and total) form the affected source;
3. Any existing Federal, State or local limitations or requirements applicable to the affected source;
4. For each affected emission point or group of affected emission points, an identification of control technology in place;
5. Information relevant to establishing the MACT floor, and, at the option of the installation, a recommended MACT floor;
6. Any other information reasonably needed by the permitting authority including, at the discretion of the permitting authority, information required pursuant to subpart A of 40 CFR Part 63;
7. Recommended emission limitations for the affected source and support information consistent with 40 CFR 63.52(f). You may recommend a specific design, equipment, work practice or operational standard, or combination thereof, as an emission limitation;
8. A description of the control technologies that you would apply to meet the emission limitation including technical information on the design, operation, size, estimated control efficiency and any other information deemed appropriate by the permitting authority, and identification of the affected sources to which the control technologies shall be applied;
9. Relevant parameters to be monitored and frequency of monitoring to demonstrate continuous compliance with the MACT emission limitation over the applicable reporting period.

Appendix A

County Information									
FIPS	County Number	County Name		FIPS	County Number	County Name		FIPS	County Number	County Name
001	0020	Adair		079	1880	Grundy		157	3620	Perry
003	0040	Andrew		081	1940	Harrison		159	3660	Pettis
005	0060	Atchison		083	2020	Hentry		161	3680	Phelps
007	0080	Audrain		085	2060	Hickory		163	3700	Pike
009	0140	Barry		087	2120	Holt		165	3740	Platte
011	0160	Barton		089	2140	Howard		167	3780	Polk
013	0180	Bates		091	2160	Howell		169	3860	Pulaski
015	0250	Benton		093	2200	Iron		171	3880	Putnam
017	0340	Bollinger		095	2240	Jackson		173	3900	Ralls
019	0380	Boone		097	2260	Jasper		175	3920	Randolph
021	0520	Buchanan		099	2280	Jefferson		177	3940	Ray
023	0560	Butler		101	2340	Johnson		179	3980	Reynolds
025	0580	Caldwell		103	2480	Knox		181	4040	Ripley
027	0620	Callaway		105	2500	Laclede		183	4160	St. Charles
029	0640	Camden		107	2540	Lafayette		185	4200	St. Clair
031	0720	Cape Gir.		109	2580	Lawrence		187	4220	St. Francois
033	0740	Carroll		111	2640	Lewis		510	4280	St. Louis City
035	0780	Carter		113	2700	Lincoln		189	4300	St. Louis
037	0840	Cass		115	2720	Linn		186	4340	Ste Genevieve
039	0860	Cedar		117	2740	Livingston		195	4380	Saline
041	0920	Chariton		119	2780	McDonald		197	4400	Schuyler
043	0980	Christian		121	2820	Macon		199	4420	Scotland
045	1000	Clark		123	2840	Madison		201	4440	Scott
047	1020	Clay		125	2920	Maries		203	4480	Shannon
049	1080	Clinton		127	2940	Marion		205	4500	Shelby
051	1100	Cole		129	3000	Mercer		207	4600	Stoddard
053	1140	Cooper		131	3040	Miller		209	4620	Stone
055	1160	Crawford		133	3060	Mississippi		211	4680	Sullivan
057	1240	Dade		135	3140	Moniteau		213	4720	Taney
059	1260	Dallas		137	3160	Monroe		215	4740	Texas
061	1280	Daviess		139	3180	Montgomery		217	4860	Vernon
063	1300	DeKalb		141	3200	Morgan		219	4880	Warren
065	1360	Dent		143	3300	New Madrid		221	4940	Washington
067	1420	Douglas		145	3320	Newton		223	4960	Wayne
069	1440	Dunklin		147	3340	Nodaway		225	5000	Webster
071	1680	Franklin		149	3460	Oregon		227	5140	Worth
073	1760	Gasconade		151	3480	Osage		229	5160	Wright
075	1780	Gentry		153	3520	Ozark		777	7777	Portables
077	1860	Greene		155	3600	Pemiscot				

Appendix B

Exempt Installations and Emission Units. The following installations and emission units are exempt from the requirements of this rule unless such units are Part 70 installations or are located at Part 70 installations. Emissions from exempt installations and emission units shall be considered when determining if the installation is a Part 70 installation:

1. Any installation that would be required to obtain a permit solely because it is subject to 10 CSR 10-6.070(7)(AAA) Standards of Performance for New Residential Wood Heaters;
2. Any installation that would be required to obtain a permit solely because it is subject to 10 CSR 10-6.240 or 10 CSR 10-6.250;
3. Single or multiple family dwelling units for not more than three (3) families;
4. Comfort air conditioning or comfort ventilating systems not designed or used to remove air Contaminants generated by, or released from, specific units of equipment;
5. Equipment used for any mode of transportation;
6. Livestock and livestock handling systems from which the only potential air contaminant is odorous gas;
7. Restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption;
8. Fugitive dust controls unless a control efficiency can be assigned to the equipment or control equipment;
9. Equipment or control equipment which eliminates all emissions to the ambient air;
10. Equipment (other than anaerobic lagoons) or control equipment which emits odors unless this equipment or control equipment also emits other regulated air pollutants;
11. Residential wood heaters, cook stoves or fireplaces;
12. Laboratory equipment used exclusively for chemical and physical analysis or experimentation is exempt, except equipment used for controlling radioactive air contaminants;
13. Recreational fireplaces;
14. Stacks or vents to prevent the escape of sewer gases through plumbing traps for systems handling domestic sewage only. Systems which include any industrial waste do not qualify for this exemption;
15. Combustion equipment that-
    a) Emits only combustion products;
    b) Produces less than one hundred fifty (150) pounds per day of any air contaminant; and
    c) Has a maximum rated capacity of-
        1. Less than ten (10) million British thermal units (Btus) per hour heat input by using exclusively natural or liquefied petroleum gas, or any combination of these; or
        2. Less than one (1) million Btus per hour heat input;
16. Office and commercial buildings, where emissions result solely from space heaters using natural gas or liquefied petroleum gas with a maximum rated capacity of less than twenty (20) million Btus per hour heat input. Incinerators operated in conjunction with these sources are not exempt;
17. Any country grain elevator that never handles more than one million two hundred thirty-eight thousand six hundred fifty-seven (1,238,657) bushels of grain during any twelve (12)-month period and is not located within an incorporated area with a population of fifty thousand (50,000) or more. A country grain elevator is defined as a grain elevator that receives more than fifty percent (50%) of its grain from producers in the immediate vicinity during the harvest season. This exemption does not include grain terminals which are defined as grain elevators that receive grain primarily from other grain elevators. To qualify for this exemption the owner or operator of the facility shall retain monthly records of grain origin and bushels of grain received, processed and stored for a minimum of five (5) years to verify the exemption requirements. Monthly records must be tabulated within seven (7) days of the end of the month. Tabulated monthly records shall be made available immediately to Missouri Department of Natural Resources representatives for an announced inspection or within three (3) hours for an unannounced visit; and
18. Sand and gravel operations that have a maximum capacity to produce less than seventeen and one-half (17.5) tons of product per hour and use only natural gas as fuel when drying; and
19. Noncommercial incineration of dead animals, the on-site incineration of resident animals for which no consideration is received or commercial profit is realized, as authorized in section 269.020.6, RSMo2000.

Appendix C

ACTIVITIES NOT REQUIRED TO BE LISTED

The Agency considers the following activities as trivial or to have negligible emissions.
No information is required elsewhere in the permit application or on an Emission Inventory Questionnaire (EIQ) regarding these activities.

1. Combustion emissions from the propulsion of mobile sources, except for vessel emissions from outer continental shelf (OCS) sources.
2. Air-conditioning units used for human comfort that do not use a class I or class II ozone depleting substance and do not exhaust air pollutants into the ambient air from any manufacturing or other industrial process.
3. Ventilating units used for human comfort that do not exhaust air pollutants into the ambient air from any manufacturing or other industrial process.
4. Noncommercial food preparation or restaurants and other retail establishments for the purpose of preparing food for employee and guest consumption.
5. Consumer use of office equipment and products, not including printers or businesses primarily involved in photographic reproduction. This exemption is for office equipment that is NOT part of the industrial process of the facility (e.g., white out use and photocopies at a non-photocopy business).
6. Janitorial services and consumer use of janitorial products.
7. Internal combustion engines used for landscaping and other agricultural purposes.
8. Laundry activities, except for dry-cleaning and steam boilers.
9. Bathroom/toilet vent emissions.
10. Emergency (backup) electrical generators at residential locations.
11. Tobacco smoking rooms and areas.
12. Blacksmith forges.
13. Plant maintenance and upkeep activities (e.g., grounds keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and are not otherwise triggering a permit modification.
14. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and are not otherwise triggering a permit modification.
15. Portable electrical generators which can be moved by hand (i.e., that can be moved without the assistance of any motorized or non motorized vehicle, conveyance or device.
16. Air compressors and pneumatically operated equipment. Including hand tools.
17. Batteries and battery charging stations.
18. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP.
19. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
20. Equipment used to mix and package soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
21. Drop hammers or hydraulic presses for forging or metal working.
22. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
23. Vents from continuous emissions monitoring and other analyzers.
24. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formula.
25. Equipment used for surface coating, painting, dipping or spraying operations, except those that will emit a VOC or HAP.
26. Batch loading and unloading of solid phase catalysts.
27. CO_2 lasers used only on metals and other materials which do not emit a HAP in the process.
28. Paper trimmers/binders.
29. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.

ACTIVITIES NOT REQUIRED TO BE LISTED

30. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutant.
31. Laser trimmers using dust collection to prevent fugitive emissions.
32. Bench-scale laboratory equipment used for physical or chemical analysis, but not emissions from lab fume hoods or vents.
33. Routine calibration and maintenance of laboratory equipment or other analytical instruments.
34. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
35. Hydraulic and hydrostatic testing equipment.
36. Environmental chambers not using a hazardous air pollutant (HAP).
37. Shock chambers.
38. Humidity chambers.
39. Solar simulators.
40. Fugitive emissions related to movement of passenger vehicles, provided these activities are incidental to the source's primary business activity.
41. Process water filtration systems and demineralization.
42. Demineralized water tanks and demineralizer vents.
43. Boiler water treatment operations, not including cooling towers.
44. Oxygen scavenging (de-aeration) of water.
45. Fire suppression systems.
46. Emergency road flares.
47. Steam vents and safety relief valves.
48. Steam leaks.
49. Steam cleaning operations.
50. Steam sterilizers.
51. Individual valves, flanges, pump seals, and pressure relief valves which have the potential for leaks, provided they are not subject to NSPS (40 CFR Part 60) or NESHAP (40 CFR Part 61 or 63) requirements. The EPA web link is: http://www.epa.gov/docs/epacfr40/chapt-I.info/subch-C.htm

Appendix D

Hazardous Air Pollutants List

Note: This list was last updated August 2, 2000. Check to see if there are new revisions at the web site: http://www.epa.gov/ttn/atw/188polls.html

CAS #	Pollutant
75-07-0	Acetaldehyde
60-35-5	Acetamide
75-05-8	Acetonitrile
98-86-2	Acetophenone
53-96-3	2-Acetylaminofluorene
107-02-8	Acrolein
79-06-1	Acrylamide
79-10-7	Acrylic acid
107-13-1	Acrylonitrile
107-05-1	Allyl chloride
92-67-1	4-Aminobiphenyl
62-53-3	Aniline
90-04-0	o-Anisidine
1332-21-4	Asbestos
71-43-2	Benzene (including benzene from gasoline)
92-87-5	Benzidine
98-07-7	Benzotrichloride
100-44-7	Benzyl chloride
92-52-4	Biphenyl
117-81-7	Bis(2-ethylhexyl)phthalate (DEHP)
542-88-1	Bis(chloromethyl) ether
75-25-2	Bromoform
106-99-0	1,3-Butadiene
156-62-7	Calcium cyanamide
105-60-2	Caprolactam (Removed 6/18/96, 61FR30816)
133-06-2	Captan
63-25-2	Carbaryl
75-15-0	Carbon disulfide
56-23-5	Carbon tetrachloride
463-58-1	Carbonyl sulfide
120-80-9	Catechol
133-90-4	Chloramben
57-74-9	Chlordane
7782-50-5	Chlorine
79-11-8	Chloroacetic acid
532-27-4	2-Chloroacetophenone
108-90-7	Chlorobenzene
510-15-6	Chlorobenzilate
67-66-3	Chloroform
107-30-2	Chloromethyl methyl ether
126-99-8	Chloroprene
1319-77-3	Cresol/Cresylic acid (mixed isomers)
95-48-7	o-Cresol
108-39-4	m-Cresol
106-44-5	p-Cresol
98-82-8	Cumene
N/A	2,4-D (2,4-Dichlorophenoxyacetic Acid) (including salts and esters)
72-55-9	DDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethylene)
334-88-3	Diazomethane
132-64-9	Dibenzofuran
96-12-8	1,2-Dibromo-3-chloropropane

Hazardous Air Pollutants List

CAS #	Pollutant
84-74-2	Dibutyl phthalate
106-46-7	1,4-Dichlorobenzene
91-94-1	3,3'-Dichlorobenzidine
111-44-4	Dichloroethyl ether (Bis[2-chloroethyl]ether)
542-75-6	1,3-Dichloropropene
62-73-7	Dichlorvos
111-42-2	Diethanolamine
64-67-5	Diethyl sulfate
119-90-4	3,3'-Dimethoxybenzidine
60-11-7	4-Dimethylaminoazobenzene
121-69-7	N,N-Dimethylaniline
119-93-7	3,3'-Dimethylbenzidine
79-44-7	Dimethylcarbamoyl chloride
68-12-2	N,N-Dimethylformamide
57-14-7	1,1-Dimethylhydrazine
131-11-3	Dimethyl phthalate
77-78-1	Dimethyl sulfate
N/A	4,6-Dinitro-o-cresol (including salts)
51-28-5	2,4-Dinitrophenol
121-14-2	2,4-Dinitrotoluene
123-91-1	1,4-Dioxane (1,4-Diethyleneoxide)
122-66-7	1,2-Diphenylhydrazine
106-89-8	Epichlorohydrin (l-Chloro-2,3-epoxypropane)
106-88-7	1,2-Epoxybutane
140-88-5	Ethyl acrylate
100-41-4	Ethylbenzene
51-79-6	Ethyl carbamate (Urethane)
75-00-3	Ethyl chloride (Chloroethane)
106-93-4	Ethylene dibromide (Dibromoethane)
107-06-2	Ethylene dichloride (1,2-Dichloroethane)
107-21-1	Ethylene glycol
151-56-4	Ethyleneimine (Aziridine)
75-21-8	Ethylene oxide
96-45-7	Ethylene thiourea
75-34-3	Ethylidene dichloride (1,1-Dichloroethane)
50-00-0	Formaldehyde
76-44-8	Heptachlor
118-74-1	Hexachlorobenzene
87-68-3	Hexachlorobutadiene
N/A	1,2,3,4,5,6-Hexachlorocyclohexane (all stereo isomers, including lindane)
77-47-4	Hexachlorocyclopentadiene
67-72-1	Hexachloroethane
822-06-0	Hexamethylene diisocyanate
680-31-9	Hexamethylphosphoramide
110-54-3	Hexane
302-01-2	Hydrazine
7647-01-0	Hydrochloric acid (Hydrogen Chloride)
7664-39-3	Hydrogen fluoride (Hydrofluoric acid)
123-31-9	Hydroquinone
78-59-1	Isophorone
108-31-6	Maleic anhydride
67-56-1	Methanol
72-43-5	Methoxychlor
74-83-9	Methyl bromide (Bromomethane)
74-87-3	Methyl chloride (Chloromethane)

Hazardous Air Pollutants List

CAS #	Pollutant
71-55-6	Methyl chloroform (1,1,1-Trichloroethane)
78-93-3	Methyl ethyl ketone (2-Butanone)
60-34-4	Methylhydrazine
74-88-4	Methyl iodide (Iodomethane)
108-10-1	Methyl isobutyl ketone (Hexone)
624-83-9	Methyl isocyanate
80-62-6	Methyl methacrylate
1634-04-4	Methyl tert-butyl ether
101-14-4	4,4'-Methylenebis(2-chloroaniline)
75-09-2	Methylene chloride (Dichloromethane)
101-68-8	4,4'-Methylenediphenyl diisocyanate (MDI)
101-77-9	4,4'-Methylenedianiline
91-20-3	Naphthalene
98-95-3	Nitrobenzene
92-93-3	4-Nitrobiphenyl
100-02-7	4-Nitrophenol
79-46-9	2-Nitropropane
684-93-5	N-Nitroso-N-methylurea
62-75-9	N-Nitrosodimethylamine
59-89-2	N-Nitrosomorpholine
56-38-2	Parathion
82-68-8	Pentachloronitrobenzene (Quintobenzene)
87-86-5	Pentachlorophenol
108-95-2	Phenol
106-50-3	p-Phenylenediamine
75-44-5	Phosgene
7803-51-2	Phosphine
7723-14-0	Phosphorus
85-44-9	Phthalic anhydride
1336-36-3	Polychlorinated biphenyls (Aroclors)
1120-71-4	1,3-Propane sultone
57-57-8	beta-Propiolactone
123-38-6	Propionaldehyde
114-26-1	Propoxur (Baygon)
78-87-5	Propylene dichloride (1,2-Dichloropropane)
75-56-9	Propylene oxide
75-55-8	1,2-Propylenimine (2-Methylaziridine)
91-22-5	Quinoline
106-51-4	Quinone (p-Benzoquinone)
100-42-5	Styrene
96-09-3	Styrene oxide
1746-01-6	2,3,7,8-Tetrachlorodibenzo-p-dioxin
79-34-5	1,1,2,2-Tetrachloroethane
127-18-4	Tetrachloroethylene (Perchloroethylene)
7550-45-0	Titanium tetrachloride
108-88-3	Toluene
95-80-7	Toluene-2,4-diamine
584-84-9	2,4-Toluene diisocyanate
95-53-4	o-Toluidine
8001-35-2	Toxaphene (chlorinated camphene)
120-82-1	1,2,4-Trichlorobenzene
79-00-5	1,1,2-Trichloroethane
79-01-6	Trichloroethylene
95-95-4	2,4,5-Trichlorophenol
88-06-2	2,4,6-Trichlorophenol

Hazardous Air Pollutants List

CAS #	Pollutant
121-44-8	Triethylamine
1582-09-8	Trifluralin
540-84-1	2,2,4-Trimethylpentane
108-05-4	Vinyl acetate
593-60-2	Vinyl bromide
75-01-4	Vinyl chloride
75-35-4	Vinylidene chloride (1,1-Dichloroethylene)
1330-20-7	Xylenes (mixed isomers)
95-47-6	o-Xylene
108-38-3	m-Xylene
106-42-3	p-Xylene
N/A	Antimony Compounds
N/A	Arsenic Compounds (inorganic including arsine)
N/A	Beryllium Compounds
N/A	Cadmium Compounds
N/A	Chromium Compounds
N/A	Cobalt Compounds
N/A	Coke Oven Emissions
N/A	Cyanide Compounds……...1
N/A	Glycol ethers……..…2
N/A	Lead Compounds
N/A	Manganese Compounds
N/A	Mercury Compounds
N/A	Fine mineral fibers……3
N/A	Nickel Compounds
N/A	Polycyclic Organic Matter…….. 4
N/A	Radionuclides (including radon)……5
N/A	Selenium Compounds

NOTE: For all listings above which contain the word "compounds" and for glycol ethers, the following applies: Unless otherwise specified, these listings are defined as including any unique chemical substance that contains the named chemical (i.e., antimony, arsenic, etc.) as part of that chemical's infrastructure.

1) X'CN where X = H' or any other group where a formal dissociation may occur. For example, KCN or $Ca(CN)_2$.

2) On January 12, 1999 (64FR1780), the EPA proposed to modify the definition of glycol ethers to exclude surfactant alcohol ethoxylates and their derivatives (SAED). On August 2, 2000 (65FR47342), the EPA published the final action. This action deletes each individual compound in a group called the surfactant alcohol ethoxylates and their derivatives (SAED) from the glycol ethers category in the list of hazardous air pollutants (HAP) established by section 112(b)(1) of the Clean Air Act (CAA). EPA also made conforming changes in the definition of glycol ethers with respect to the designation of hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

"The following definition of the glycol ethers category of hazardous air pollutants applies instead of the definition set forth in 42 U.S.C. 7412(b)(1), footnote 2: Glycol ethers include mono- and di-ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH2CH2)n-OR'

Where:
n= 1, 2, or 3
R= alkyl C7 or less, or phenyl or alkyl substituted phenyl
R'= H, or alkyl C7 or less, or carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate.

3) (Under Review)
4) (Under Review)
5) A type of atom which spontaneously undergoes radioactive decay.

Appendix E

Pollutants Regulated Under Section 112(r) "Accidental Release Prevention"

Regulated Toxic Substances (§112r)	CAS Number	
ACROLEIN	107-02-8	*
ACRYLONITRILE	107-13-1	*
ACRYLYL CHLORIDE	814-68-6	
ALLYL ALCOHOL	107-18-61	
ALLYLAMINE	107-11-9	
AMMONIA (ANHYDROUS)	7664-41-7	
AMMONIA (CONC. 20% OR GREATER)	7664-41-7	
ARSENOUS TRICHLORIDE	7784-34-1	*
ARSINE	7784-42-1	*
BORON TRICHLORIDE	10294-34-5	
BORON TRIFLUORIDE	7637-07-2	
BORON TRIFLUORIDE WITH METHYL ETHER (1:1)	353-42-4	
BROMINE	7726-95-6	
CARBON DISULFIDE	75-15-0	*
CHLORINE	7782-50-5	*
CHLORINE DIOXIDE	10049-04-4	
CHLOROFORM	67-66-3	*
CHLOROMETHYL ETHER	542-88-1	
CHLOROMETHYL METHYL ETHER	107-30-2	*
CROTONALDEHYDE	4170-30-3	
CROTONALDEHYDE (E)-	123-73-9	
CYANOGEN CHLORIDE	506-77-4	*
CYCLOHEXYLAMINE	108-91-4	
DIBORANE	19287-45-7	
DIMETHYLDICHLOROSILANE	75-78-5	
DIMETHYLHYDRAZINE, 1,1-	57-14-7	*
EPICHLOROHYDRIN	106-89-8	*
ETHYLENEDIAMINE	107-15-3	
ETHYLENEIMINE	151-56-4	*
ETHYLENE OXIDE	75-21-8	*
FLUORINE	7782-41-4	
FORMALDEHYDE (SOLUTION)	50-00-0	*
FURAN	110-00-9	
HYDRAZINE	302-01-2	*
HYDROCHLORIC ACID (CONC. 30% OR GREATER)	7647-01-0	
HYDROCYANIC ACID	74-90-8	
HYDROGEN CHLORIDE (ANHYDROUS)	7647-01-0	*
HYDROGEN FLUORIDE/HYDROFLUORIC ACID (CONC. 50% OR GREATER)	7664-39-3	*
HYDROGEN SELENIDE	7783-07-5	
HYDROGEN SULFIDE	7783-06-4	
IRON, PENTACARBONYL-	13463-40-6	
ISOBUTYRONITRILE	78-82-0	
ISOPROPYLCHLOROFORMATE	108-23-6	
METHACRYLONITRILE	126-98-7	
METHYL CHLORIDE	74-87-3	*
METHYL CHLOROFORMATE	79-22-1	
METHYL HYDRAZINE	60-34-4	*
METHYL ISOCYANATE	624-83-9	*
METHYL MERCAPTAN	74-93-1	
METHYL THIOCYANATE	556-64-9	
METHYLTRICHLOROSILANE	75-79-6	
NICKEL CARBONYL	13463-39-3	*
NITRIC ACID (CONC. 80% OR GREATER)	7697-37-2	
NITRIC OXIDE	10102-43-9	
OLEUM (FUMING SULFURIC ACID)	8014-95-7	
PERACETIC ACID	79-21-0	
PERCHLOROMETHYLMERCAPTAN	594-42-3	

Appendix E Continued

Regulated Toxic Substances (§112r)	CAS Number	
PHOSGENE	75-44-5	*
PHOSPHINE	7803-51-2	*
PHOSPHORUS OXYCHLORIDE	10025-87-3	*
PHORPHORUS TRICHLORIDE	7719-12-2	*
PIPERDINE	110-89-4	
PROPIONITRILE	107-12-0	
PROPYL CHLOROFORMATE	109-61-5	
PROPYLENEIMINE	75-55-8	*
PROPYLENE OXIDE	75-56-9	*
SULFUR DIOXIDE (ANHYDROUS)	7446-09-5	
SULFUR TETRAFLUORIDE	7783-60-0	
SULFUR TRIOXIDE	7446-11-9	
TETRAMETHYLLEAD	75-74-1	*
TETRANITROMETHANE	509-14-8	*
TITANIUM TETRACHLORIDE	7550-45-0	*
TOLUENE 2,4-DIISOCYANATE	584-84-9	*
TOLUENE 2,6-DIISOCYANATE	91-08-7	
TOLUENE DIISOCYANATE (UNSPECIFIED ISOMER)	26471-62-5	
TRIMETHYLCHLOROSILANE	75-77-4	
VINYL ACETATE MONOMER	108-05-4	*
ACETALDEHYDE	75-07-0	*
ACETYLENE	74-86-2	
BROMOTRIFLUORETHYLENE	598-73-2	
BUTADIENE, 1,3-	106-99-0	*
BUTANE	106-97-8	
BUTENE, 1-	106-98-9	
BUTENE, 2-	107-01-7	
BUTENE	25167-67-3	
BUTENE-cis, 2-	590-18-1	
BUTENE-trans, 2-	624-64-6	
CARBON OXYSULFIDE	463-58-1	
CHLORINE MONOXIDE	7791-21-1	
CHLOROPROPYLENE, 2-	557-98-2	
CHLOROPROPYLENE, 1-	590-21-6	
CYANOGEN	460-19-5	
CYCLOPROPANE	75-19-4	
DICHLOROSILANE	4109-96-0	
DIFLUOROETHANE	765-37-6	
DIMETHYLAMINE	124-40-3	
DIMETHYLPROPANE, 2,2-	463-82-1	
ETHANE	74-84-0	
ETHYL ACETYLENE	107-00-6	
ETHYLAMINE	75-04-7	
ETHYL CHLORIDE	75-00-3	*
ETHYLENE	74-85-1	
ETHYL ETHER	60-29-7	
ETHYL MERCAPTAN	75-08-1	
ETHYLNITRITE	109-95-5	
HYDROGEN	1333-74-0	
ISOBUTANE	75-28-5	
ISOPENTANE	78-78-4	
ISOPRENE	78-79-5	
ISOPROPYLAMINE	75-31-0	
ISOPROPYL CHLORIDE	75-29-6	
METHANE	74-82-8	
METHYLAMINE	74-89-5	
METHYL-1-BUTENE, 3-	563-45-1	
METHYL-1-BUTENE, 2-	563-46-2	
METHYL ETHER	115-10-6	
METHYL FORMATE	107-31-3	

Appendix F

Emission Limit Thresholds

Note: If the installation is in an area that is a non-attainment zone, the below numbers may change. Currently, a moderate nonattainment area for ozone consists of Franklin, Jefferson, St. Charles and St. Louis Counties, and the City of St. Louis. Also nonattainment areas for lead include the city of Herculaneum in Jefferson County, and the Dent, Liberty and Arcadia townships in Iron County. To see if the facility is in a non-attainment zone and the associated rules, check 10 CSR 10-6.065, web site http://mosl.sos.state.mo.us/csr/10csr/10c10-6a.pdf

If the installation's Potential to Emit (PTE) is below all the levels in the table below, then the installation is not required to submit an operating permit application. Potential to Emit is calculated by multiplying maximum emissions (MHDR * Emission Factor) by the maximum hours per year (8760) as explained on Pages 7 and 8 of the instructions.

De Minimis Emission Levels	
Air Contaminant	*Emission Rate (tpy)*
Carbon monoxide (CO)	100.0
Nitrogen dioxide (NO_2)	40.0
Particulate Matter	
PM	25.0
PM_{10} (Particulate matter smaller than 10 microns in diameter)	15.0
Sulfur dioxide (SO_2)	40.0
Ozone (to be measured as VOC)	40.0
Lead (Pb)	0.6
Mercury (Hg)	0.1
Beryllium (Be)	0.0004
Asbestos	0.007
Fluorides	3.0
Sulfur acid mist	7.0
Vinyl chloride	1.0
Hydrogen sulfide	10.0
Total reduced sulfur (including hydrogen sulfide)	10.0
Reduced sulfur compounds (including hydrogen sulfide)	10.0
Municipal waste combustor organics (measured as total tetra-through octa-chlorinated dibenzo-p-dioxins and dibenzofurans)	3.5×10^{-6}
Municipal waste combustor metals (measured as particulate matter)	15.0
Municipal waste combustor acid gases (measured as sulfur dioxide and hydrogen chloride)	40.0
Municipal solid waste landfill emissions (measured as nonmethane organic compounds)	50.0
Hazardous air pollutants (HAPs) (each) (See Appendix D for listings of HAPs)	10.0
Sum of hazardous air pollutants	25.0

However if one or more criteria pollutant for the facility's (PTE) is above the De Minimis levels shown above and below the Major Levels shown below, then the facility is considered a Basic.

Major Source Threshold Levels	
Air Contaminant	*Emission Rate (tpy)*
Carbon monoxide	100.0
PM10	100.0
SOx	100.0
NOx	100.0
Volatile Organic Compounds (VOC)	100.0
Lead	5.0
Hazardous air pollutants (each) (See Appendix D)	10.0
Sum of hazardous air pollutants	25.0

If the facility's Potential to Emit is above the thresholds for a Major Source, then it is considered a Part 70 (Major) source. Example: 101 tpy PTE sulfur dioxide would make any source a Part 70 source.

The Part 70 source example discussed above would be considered an Intermediate source only if they place Voluntary Limitations on the facility. For example, if the source placed a limitation on the hours of operation or materials combusted with lower SO_2 emissions, they would be considered an Intermediate source if the limited potential-to-emit is calculated below Major thresholds.

Appendix G

MAJOR GROUP STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES

Code	Major Group Title
01	Agriculture production - crops
02	Agriculture production - livestock and animal specialties
07	Agricultural services
08	Forestry
09	Fishing, hunting, and trapping
10	Metal mining
12	Coal mining
13	Oil and gas extraction
14	Mining and quarrying of nonmetallic minerals, except fuels
15	Building construction - general contractors and operative builders
16	Heavy construction other than building construction - contractors
17	Construction - special trade contractors
20	Food and kindred products
21	Tobacco products
22	Textile mill products
23	Apparel and other finished products made from fabrics and similar materials
24	Lumber and wood products, except furniture
25	Furniture and fixtures
26	Paper and allied products
27	Printing, publishing, and allied industries
28	Chemicals and allied products
29	Petroleum refining and related industries
30	Rubber and miscellaneous plastics products
31	Leather and leather products
32	Stone, clay, glass, and concrete products
33	Primary metal industries
34	Fabricated metal products, except machinery and transportation equipment
35	Industrial and commercial machinery and computer equipment
36	Electronic and other electrical equipment and components, except computer equipment
37	Transportation equipment
38	Measuring, analyzing, and controlling instruments; photographic, medical and optical goods; watches and clocks
39	Miscellaneous manufacturing industries
40	Railroad transportation
41	Local and suburban transit and interurban highway passenger transportation
42	Motor freight transportation and warehousing
43	United States Postal Service
44	Water transportation
45	Transportation by air
46	Pipelines, except natural gas
47	Transportation services
48	Communications
49	Electric, gas, and sanitary services
50	Wholesale trade - durable goods
51	Wholesale trade - nondurable goods
52	Building materials, hardware, garden supply, and mobile home dealers
53	General merchandise stores
54	Food stores
55	Automotive dealers and gasoline service stations
56	Apparel and accessory stores
57	Home furniture, furnishings, and equipment stores
58	Eating and drinking places
59	Miscellaneous retail

Code	Major Group Title
60	Depository institutions
61	Non-depository credit institutions
62	Security and commodity brokers, dealers, exchanges, and services
63	Insurance carriers
64	Insurance agents, brokers, and services
65	Real estate
67	Holding and other investment offices
70	Hotels, rooming houses, camps, and other lodging places
72	Personal services
73	Business services
75	Automotive repairs, services, and parking
76	Miscellaneous repair services
78	Motion pictures
79	Amusement and recreation services
80	Health services
81	Legal services
82	Educational services
83	Social services
84	Museums, art galleries, and botanical and zoological gardens
86	Membership organizations
87	Engineering, accounting, research, management, and related services
88	Private households
89	Miscellaneous services
91	Executive, legislative, and general government, except finance
92	Justice, public order, and safety
93	Public finance, taxation, and monetary policy
94	Administration of human resource programs
95	Administration of environmental quality and housing programs
96	Administration of economic programs
97	National security and international affairs
99	Non-classifiable establishments

Appendix H

Monitoring Parameters for Control Devices

This Appendix is meant to serve as a starting point for installations trying to determine what monitoring parameters are sufficient to show compliance. This is **not** a comprehensive list and the monitoring parameters are **not** mandatory. These are only suggestions of parameters the installation may want to examine for monitoring purposes when a control device is necessary to demonstrate compliance with an emission limitation.

Fabric Filters (Baghouses)

Fabric filters collect particles with sizes ranging from submicron to several hundred microns in diameter at efficiencies generally in excess of 99 percent. The layer of dust, or dust cake, collected on the fabric is primarily responsible for such high efficiency. The following operating parameter can be measured to ensure this efficiency:

1. Pressure drop across the filter system – Typical values of system pressure drop range from about 5 to 20 inches of water. Frequency of measurements can vary from continuous to daily, depending on the emission unit.

In addition to monitoring pressure drop, a compliance plan may include a schedule to semi-annually inspect the filter system for leaks, wear, or any abnormalities that could result in malfunction.

Scrubbers

Many types of scrubbers are used to control several different pollutants. The following is a brief summary of a few different scrubbers and the monitoring parameters associated with each:

Wet Scrubbers (spray towers, venturi scrubbers, impingement scrubbers, wet cyclonic scrubbers) for Particulate Control:

1. Pressure Drop across inlet and outlet ducts
2. Scrubbing Liquid flow rate
3. Scrubber exhaust temperature

Wet Scrubbers for SO_2 Control:

1. Scrubbing liquid pH
2. Scrubbing liquid flow rate

Spray Dryer for SO_2 Control:

1. Pressure Drop
2. Alkali solution concentration and flow rate

Packed Bed Scrubber for VOC Control:

1. Scrubbing liquid flow rate

Dry Scrubbers

1. Pressure Drop

Thermal Oxidizers

Thermal oxidizers are combustion systems that generally control VOC, CO, and volatile HAPs by combusting them to carbon dioxide (CO_2) and water. Typical parameters that may be monitored to indicate proper operation include:

1. Waste gas temperature.
2. Incinerator combustion temperature.
3. Outlet CO concentration.
4. Outlet CO_2 or oxygen concentration.

Catalytic Oxidizers

Catalytic oxidizers operate on the same principal as thermal oxidizers, except that a catalyst is used to increase the rate of the combustion reaction. Typical parameters that may be monitored to indicate proper operation include:

1. Temperature rise across catalyst bed.
2. Pressure drop across catalyst bed.
3. Outlet CO concentration.

Electrostatic Precipitators

Electrostatic Precipitators (ESPs) can be used for the high efficiency collection of particulate matter. The following operating parameters can be measured to ensure this efficiency:

1. Primary and secondary voltage.
2. Primary and secondary current.
3. Sparking rate.
4. Number of fields on line.

An ESP can also have an operation and maintenance plan that includes the following:

1. Inspection of rapper operation.
2. T-R set operation.
3. Inspection of the ash removal system.
4. Each major unit overhaul which include:
   a) Checking for correct plate electrode alignment.
   b) Inspection of the condition collection surface fouling.
   c) Checking mechanical condition of the T-R set and the inspection of the internal structural components.

Ranges and values for the parameters identified above can be determined from a performance test.

Allowable Emission Rate

The emission rate calculated using the maximum rated capacity of the installation (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following:

1. emission limit established in any applicable emission control rule including those with a future compliance date,
2. the emission rate specified as a permit condition.

For example: An installation has an emission unit which has process inputs of 40 tons per hour along with potential PM_{10} emissions of 50 pounds per hour. State Regulation 10 CSR 10-3.050, "Restriction of Emission of Particulate Matter From Industrial Processes", restricts the level of potential emission rate from a process with inputs of 40 tons per hour to a maximum of 42.5 pounds per hour. The 42.5 pound per hour value is said to be the allowable emission rate for this emission unit.

The installation, at a minimum, would have to restrict the potential emissions from the emission unit to a potential emission rate of 42.5 pounds per hour. The limitation on the potential emissions would have result from applying for some form of a "Federally Enforceable Condition" on the Emission Unit.

Application Shield

For Part 70 installations, EPA and Missouri rules provide that once a complete (as well as timely) application has been filed, the applicant has an “application shield” from any claim that the installation is being operated without an issued operating permit. However, the application shield can be lost if, after a completeness determination had been made, the applicant fails to provide any reasonable requested additional information by a specified deadline.

Basic State Installation:

An installation that has the potential to emit greater than de minimis levels of any criteria pollutant or is subject to any limitation, standard, or other requirement (regardless of emission rate) under section 111 or 112 (with the exception of 112(r)) of the Clean Air Act but does not meet the criteria for **Part 70 installations**.

CAS #:

Chemical Abstract Service Registry Number.

CFR:

Code of Federal Regulations.

Control Device:

Equipment or process used to remove or prevent air contaminants from being emitted from an air pollution generating process.

CSR:

Code of State Regulations.

Emission Factor:

An average value that relates the quantity of a pollutant released to the atmosphere with the amount of activity associated with the process releasing that pollutant. Such factors can be used to estimate the emissions from various sources generating air pollution. An emission factor for natural gas combustion is 3.0 lbs of PM_{10} per Million Cubic Feet (MMCF) of gas burned. An emission factor for a haul road can be 2.7 lbs. of PM_{10} per Vehicle Miles Traveled (VMT).

Emission Point:

Any specific point or area where an air pollutant is released from a process or operation into the ambient air.

Example: Suppose the first emission point at a facility is a 30 foot stack which emits pollutants from a boiler, the stack rather than the boiler could be labeled EP1. The boiler would be the process producing air pollutants, so an appropriate Source Classification Code (SCC) would be chosen to reflect that the boiler is one process under this emission point.

Emission Unit:
Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act (10 CSR 10-6.020). For the purposes of the operating permit application, an emission unit is a sub-point of an emission point from the Emissions Inventory Questionnaire.

For example, an EIQ for Facility B lists Emission Point 1 as a stack which emits pollutants from two boilers and a kiln. The three emission units are boiler 1, boiler 2, and the kiln.

FIPS #:
This is the first three digits of an identification number assigned to each installation in the Air Pollution Control Program (APCP) database. Each county within the state has been assigned a unique number by the federal government. Every installation in New Madrid county, for example, will be assigned a FIPS number of 143.

Intermediate State Installation:
An installation that would meet the emissions criteria for a **Part 70 installation**, except for the imposition of voluntarily agreed to **Federally-Enforceable Conditions** proposed in the operating permit application, that reduce its potential emissions below Part 70 levels.

Installation:
All emission point\unit operations that belong to the same industrial grouping (the same first two-digits of the SIC code) that are located on one or more contiguous or adjacent properties and are under the control of the same person (or persons under common control). This definition includes any activities that result in fugitive emissions, and any marine vessels emissions while docked at the installation. (As defined in 10 CSR 10 6.020)

MHDR (Maximum Hourly Design Rate):
Maximum Hourly Design Rate is the maximum throughput that could be processed in one hour of continuous operation by the equipment at this emission point. The throughput and MHDR must be expressed in the same SCC (Source Classification Code) units. If specific equipment information on the MHDR is not available, contact the Air Pollution Control Program for alternative methods to estimate the MHDR.

Part 70 Installation:
An installation that meets either a source category or the emission criteria in 10 CSR 10-6.065(1)(D). Part 70 installations are subject to all the Part 70 operating permit requirements found in Section (6) of 10 CSR 10-6.065. See Instructions for Section A for information on how to determine whether your facility is a Part 70 installation.

Plant #:
This is the last four digits of a seven digit identification numbers assigned to all installations in the APCP database. Each installation within a county has been assigned this unique identification number by the Air Pollution Control Program (APCP).

SIC (Standard Industrial Classification):
This is a designation system by the federal government. The Standard Industrial Classification was developed for use in the classification of establishments by type of activity in which they are engaged; for purposes of facilitating the collection, presentation, and analysis of data relating to establishments; and for promoting uniformity and comparability in the presentation of statistical data collected by various agencies of the United States Government, State agencies, trade

associations, and private research organizations. The SIC for *establishments* differ from a classification for *enterprises* (companies) or products. An enterprise consists of all establishments having more than 50% common direct or indirect ownership. The SIC is intended to cover the entire field of economic activities: agriculture, forestry, fishing, hunting, and trapping; mining; construction; manufacturing; transportation, communication, electric, gas, and sanitary services; wholesale trade; retail trade; finance, insurance, and real estate; personal, business, professional, repair, recreation, and other services; and public administration.

SCC (Source Classification Code):

This is an eight digit number associated with a unique process from which air pollutants are emitted.

Example: A solvent-based paint applied in a paint booth could have an SCC of 4-02-001-01 or 4-02-001-02. Which of the two is appropriate would depend on the throughput units chosen. The throughput units for 4-02-001-01 are in tons of coating mix applied. Throughput units for 4-02-001-02 are in gallons of coating mix applied.